



A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY
(INCORPORATED).

VOL. XXIII.

CHICAGO, ILLINOIS, DECEMBER 15, 1904.

No. 6. { ONE DOLLAR PER ANNUM.
SINGLE COPY, TEN CENTS.

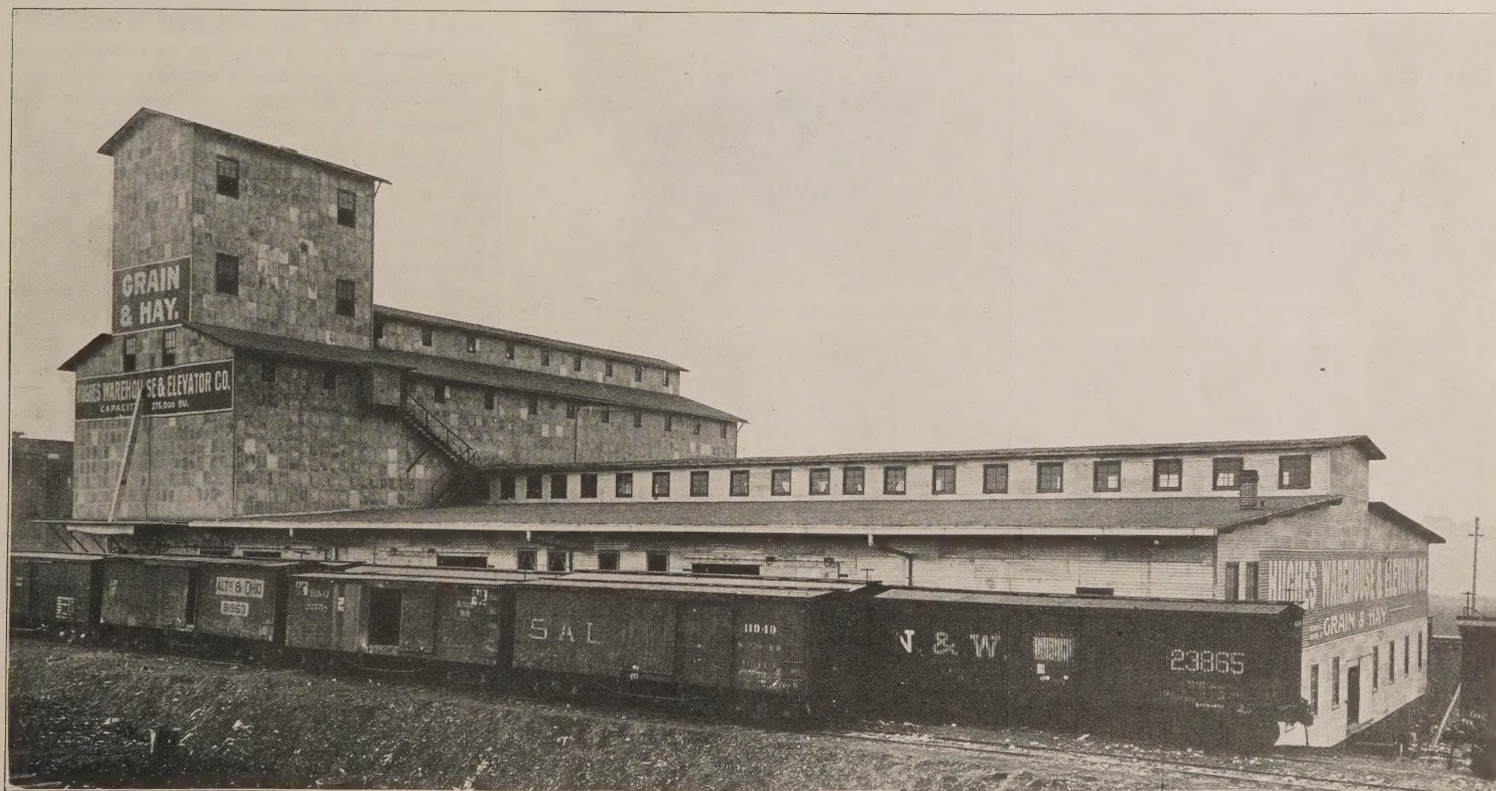
HUGHES WAREHOUSE AND ELEVATOR COMPANY, NASHVILLE.

Nashville, Tenn., has always ranked high as a grain and milling center, being the fourth most important milling center of the United States and the largest flour producer in the South. It is also

ing illustration has had not a little to do. It is the property of the Hughes Warehouse and Elevator Company, a corporation composed of some of the conspicuous financial factors of the business life of Nashville. Its executive officers are H. H. Hughes, president; Maj. E. C. Lewis, vice-president, and Thomas Taylor, secretary-treasurer.

While the elevator is a model in its construction,

privileges. To these advantages of site, the architects, Messrs. Schuyler, Schuyler & Co., milling and mechanical engineers—a firm composed of experienced mill and elevator builders, who recently established headquarters at Nashville because of its vital position relative to the milling and elevator industries of the South—who planned, constructed and equipped the building, kept constantly before



ELEVATOR AND WAREHOUSE OF THE NASHVILLE WAREHOUSE AND ELEVATOR COMPANY, NASHVILLE, TENNESSEE.

a very important gateway into the Southeast, the local dealers having handled 5,356 cars of hay and 24,192 cars of grain in the twelve months ended July 1 last, all valued at about \$19,000,000, and the rapid strides it is making in both milling and grain handling now bid fair to add materially to its importance in both trades and to bring it even closer to the top rank of producing and distributing centers. In accelerating this new growth as a distributing gateway the fine plant shown in the accompany-

ing illustration has had not a little to do. It is the property of the Hughes Warehouse and Elevator Company, a corporation composed of some of the conspicuous financial factors of the business life of Nashville. Its executive officers are H. H. Hughes, president; Maj. E. C. Lewis, vice-president, and Thomas Taylor, secretary-treasurer. While the elevator is a model in its construction,

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A brief description of the plant will indicate, therefore, that it is modern and complete in every particular, having every modern convenience for a capacity of 175,000 bushels of bulk grain and 150,000 bushels' warehouse capacity. The transmission and conveying machinery was manufactured by

Stephens-Adamson Manufacturing Company, Aurora, Ill., and consists of two elevator legs, each having 7,000 bushels' capacity per hour; one double grain shovel; one car puller; two belt conveyors of 8,000 bushels' capacity per hour, one being over and one underneath the bins, and the top belt having a No. 41 self-propelling tripper for distributing grain to either of the 60 bins. A 100,000-pound hopper scale is in use, through which all grain must pass going in and coming out. This scale has the new registering beam, making mistakes almost an impossibility, and is the largest hopper scale in this section. It will weigh most of the largest carloads in one draft, which also minimizes the probability of errors in total weight. The cleaning machinery consists of one Monitor Dustless Warehouse Separator of 3,000 bushels' capacity per hour, and one oat clipper of 1,500 bushels per hour.

The bins are made of 2x6-inch yellow pine cribbing, the top of head house, or cupola, standing 110 feet high.

The elevator building proper is covered with No. 26 corrugated steel, galvanized, while the warehouse is covered with galvanized steel weather boarding, making a very handsome building from the outside and one which Nashville feels justly proud of.

The power is derived from a 60-horsepower gas engine firmly installed on a concrete foundation, similar to that on which the building itself rests.

PHILADELPHIA COMMERCIAL EXCHANGE.

The fiftieth anniversary of the founding of the Philadelphia Commercial Exchange was celebrated by a banquet at Philadelphia's new palatial hostelry, the Bellevue-Stratford, at which about 170 members of the Exchange were present, including Geo. Raphael of Beverly, N. J., the only honorary member, who joined the Exchange in 1855. There were then about 35 members, against 414 now, engaged now, as then, chiefly in the grain, flour, hay, feed, provisions and kindred trades, as well as steamship and shipping agents. There were numerous interesting addresses, Walter F. Hagar, president of the Exchange, being toastmaster. In his introductory remarks, Mr. Hagar sketched the history of the Commercial Exchange. Contrasting past and present conditions, he said:

In the days of its first organization the great grain fields of the West were only beginning to be developed, and the business of our members was mainly within a radius of 100 miles of Philadelphia. The competition of Baltimore then for the trade of the Cumberland Valley was relatively of as much moment to our membership as to-day the competition of the Gulf and of Canada is to us in our battle for a share of the products of the broad valleys of the Mississippi and the Missouri.

We of to-day can hardly realize that when our Exchange began its existence the Pennsylvania Railroad was not open west of Harrisburg, though it was completed shortly after, and it was not until ten years later that our city obtained, by the completion of the Philadelphia and Erie Railroad, its first direct through-rail connection with the Great Lakes. The development of the trade with Buffalo and the lake routes centering there did not follow until 1892, when the temporary acquisition of the Lehigh Valley Railroad by the Philadelphia and Reading gave to Philadelphia an opportunity which the more enterprising members of our Exchange were not slow to improve.

With the continual change in business methods and the modern tendency toward concentration which makes it yearly harder for the individual business man to hold his own in the world of trade, to say nothing of getting ahead, our Exchange maintains to-day a numerical strength of membership which is deserving of congratulation, and which is evidence of its still filling a useful purpose in the commercial community.

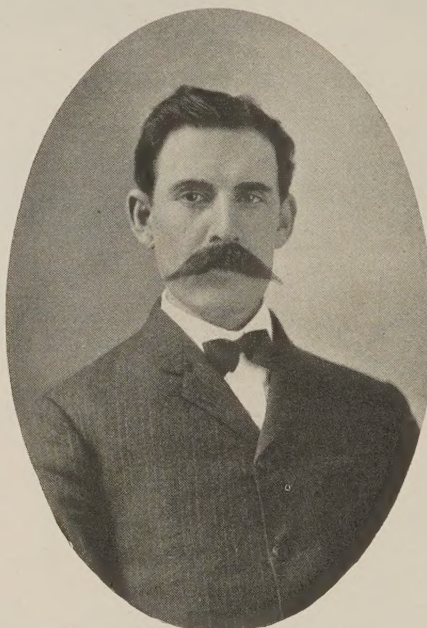
No organization, however, stands still; it must either move forward or drop backward; we sow in the present the seed of the future. What must be done to perpetuate this association, which is endeared to us by many ties? It seems to me that the welfare of our organization, its capacity for growth and usefulness, is based not only upon fair dealing among the members and strict respect for the rules, but upon an active participation in all worthy matters that affect the interests of the community at large, as well as of our particular mem-

bership. This includes vigilance in the safeguarding of our rights as citizens and fearlessness in attacking wrongs in whatever guise they may appear.

J. G. Thayer, fifth vice-president of the Pennsylvania Lines, responding to the toast of "Our Railroads," said the relations of the railroads and the commercial community are much closer and more cordial than ever. This has been brought about by a better understanding on the part of each other's position. On the part of the railroads it has come to be better recognized that they have a duty to perform to the state, and that their obligations extend beyond mere considerations of dollars and cents. He concluded with an expression of gratification at the abolition of rebates on freight. "I can say with frankness," he added, "that there is no rebate or private concession of any kind on any of our lines."

E. P. BAUDER.

The West is everywhere permeated by the blood of New England; and is the better and stronger for it—so strong, indeed, that it now has brains, skill and experience to spare to return the compli-



E. P. BAUDER, PORTLAND, ME.

ment by sending men to New England to direct her industries where need is. Not that New England needs many such men, but those she does call for must needs be of the best. So when in December, 1902, the Grand Trunk Railway Company was in need of a manager for its terminal elevators at Portland, Me., the West sent E. P. Bauder, and no fault has been found with the gift.

Mr. Bauder is a native of Minnesota, having been born in Winona, on March 10, 1861. Here he was educated in the common school, and here he made his home until 1885, when he went to Clinton, Iowa, from which place he removed to Chicago, having, after leaving school, become familiar with the flour and coal trades, as well as with various phases of railroad work. It was while living in Chicago that he became an employe of the Chicago Board of Trade weighing department, from which he was taken, after four years' experience, and placed in charge of the Grand Trunk Elevator at Chicago as foreman under the management of Lasier & Hooper, and later as superintendent. It was from this position that he went to Portland in 1902.

In the present and recent state of the export trade at the Atlantic Coast ports, the Portland houses are about the only ones doing business in any volume. The business which comes in over the Grand Trunk System is principally of an export character in which Canadian grain figures largely, but there is considerable shipping of domestic grain in small coasting vessels along the Maine coast.

The Grand Trunk's elevator plant at Portland

consists of two elevators with a combined capacity of two and one-half million bushels and is capable of unloading 250 cars of grain every ten hours and of delivering grain to six steamships at one time at the rate of 16,000 bushels per hour to each ship.

Portland has a regular service, during the winter, of steamships to Liverpool, London, Glasgow, Bristol and Avonmouth, England; and to Antwerp and Hamburg, with occasional steamships to charter ports in France and Ireland. There is also an all-the-year service, winter and summer, to Liverpool, one steamer sailing weekly.

During the season of 1903, Portland shipped 13,000,000 bushels of grain on the lines named.

[For the American Elevator and Grain Trade.]

GRAIN ELEVATOR CONSTRUCTION, DEPRECIATION AND HAZARDS.

The question has been raised by insurance companies: What is it safe to place on grain elevators? or, in the language of the financier, What can we afford to loan on this class of property, and what is the per cent of depreciation for different periods of time?

The vital part of a grain elevator is the wood posts and girders that support cribbing and all above.

Construction of Elevators.—Piles in clusters of nine (three each way) and sixteen (four each way), nine piles on outside tiers and sixteen on inside tiers, as the inside tiers support twice the weight of the outside tiers. Piles are driven into hardpan, or clay, until said clay will not displace; tops of piles are sawed off and grouted in concrete; dimension stone with footings at least 6 feet square and 12 to 16 inches thick, placed on concrete, and piers built up to level of floor of elevator.

On piers wooden posts 16x16 inches are placed in clusters of four posts, two of the posts support double 16x16-inch girders resting on oak corbels; the other two posts raise about 10 feet higher and support girders on which cribbing of bins rests; four heavy wood girders rest on the double 16-inch cross-girders, supporting hoppers of bins.

Cribbing is 2x10's—2x8's on outside of building, interior walls of bins being 2x6's. Cribbing is carried up about 60 feet; planks laid flatwise and spiked together with 20d. spikes, a spike about every foot; on top of cribbing the framework of cupola rests.

The cupola as a general thing is four stories high above the bin floor, being spout floor, scale floor, garner floor and top or machinery floor. Cupola of open-finished frame sides, 2x6-inch studding inclosed with 1-inch sheathing.

Outside protection of elevator of brick, metal or slate. If of metal or slate it is nailed to outside of cribbing; if of brick, it is an independent wall, supports its own weight, is simply a veneer on outside of cribbing. Cupola is generally metal clad.

Roof, metal on wood joists and 1-inch roof boards.

In a million-bushel elevator there are about 3,500,000 feet of lumber, 3,000 piles, 1,000,000 brick, 800 cords of stone. It will cost to construct, with power plant, stack, machinery, etc., from \$250,000 to \$400,000. There is so great a range of cost in grain elevators of the same capacity that an estimate of cost should be made by insurance companies of each plant insured—foundation (costing about \$40,000) deducted and depreciation figured and amount of insurance placed by estimate found.

As an example of the range in cost of construction of grain elevators, the Indiana Elevator, Chicago, constructed by the Western Indiana Railroad Company, cost to build \$480,000, and the Wabash Elevator, constructed by George L. Dunlap, on the same set of plans, was duplicated at a cost of \$370,000 or over, or \$100,000 less; while the Iowa Elevator, built by Munger, Wheeler & Company, containing more material, was constructed at a cost of \$325,000, showing that different conditions, price of labor and materials cut a figure in construction.

The wood posts and girders hold for about twenty

years and from that to thirty years, and may stand longer, but the strength of the timber is weakened by age, and will support less weight year by year, and if one post or girder gives way, the shock is liable to bring all down, and they will crush into match wood, as shown by fall of Imperial Elevator where posts were reduced to splinters. The Union Elevator had to be rebuilt after about twenty years of use, and the Armour "C" had to have posts and timbers renewed. The weight or pressure of grain is enormous; as a bushel of wheat will weigh 60 pounds, the weight of grain in a one-million-bushel elevator will give a grain weight on posts of 60,000,000 pounds, and with weight of 3,500,000 feet of lumber and machinery added, each 16x16-inch post will have to sustain a weight of about sixty tons.

The first ten years (if repairs are kept up) would not show depreciation of over 6 per cent. The second ten years will add 10 per cent more. The third ten years will add 20 per cent more (or 36 per cent for 30 years of age is not too much), and in the same ratio.

Another variable function (not cost or depreciation): If the plant, costing about a quarter of a million dollars, is not in operation, has no business and no outlook, it can pay no interest on money invested, but taxes and expenses have to be kept up. The moral hazard here is great. A good fire, like charity, covereth a multitude of sins. There are a number of plants in this condition in Cook County.

Causes of fires in grain elevators are numerous, and if a fire gets headway so it cannot be put out with a pail of water, you may consider the building a total loss. Every empty bin, elevator boot, car or transfer spout is a flue to assist the fire. The salvage on building will consist of the brick and old iron unconsumed. Friction heads are a source of danger; for if from any cause the elevator becomes choked—as from an elevator bucket becoming detached from the belt, or a car link or pin or block of wood received in a car of grain—a fire at the head will result in thirty seconds.

There are about five hundred journals in an elevator, most of the bearings set on wood timbers, and in many instances oil soaked wood. One good hot box not noticed is enough.

Bucket belts run through wooden elevator legs at about 600 feet per minute. When belt is out of line, and the edge of the belt runs against woodwork inside the leg, friction will start a fire in about the worst place in the building.

Electric Wire Hazards.—When electric light wires hang on nails driven into woodwork, if insulation of wire is broken, an arc will form on the nail, set fire to woodwork. Water on wire is liable to do the same thing, for this was the cause of the fire that partly destroyed the cupola of Northwestern Brewing Company's Elevator. Incandescent light glass globes covered with dust will generate heat enough to start a fire. To prove this, place an incandescent light in a pail of dust and pack it; the globe will break and set fire to the dust in five minutes. All incandescent lights should have double globes, a large one over the small one, as are in use at Central Elevator "B".

Boots.—The boot of the elevator has a bad name by those who do not understand it. There is no friction or weight on a pulley in the boot to speak of. When the belt is tight and running light, the pulley has some little friction, but not much. The weight of the belt (300 feet, with 300 buckets) reduces friction to a minimum, and when grain is drawn to the elevator buckets, the belt runs below the pulley, the whole weight is at the head of the elevator, and this is where the fire occurs. Buckets carry down smoke and smell, and it is first noticed at the boot, but a few minutes later the fire breaks out at the elevator head. This was how Eckhart & Swan's Elevator caught fire—from the friction at the head—but the smoke showed at the boot.

Smoking.—The night watchman who smokes his pipe in the wee small hours and who lights it every few minutes on his rounds is another hazard.

Grain elevators veneered with brick have a space of from 8 to 12 inches between the wall and crib-

bing of bins (cribbing of bins shrinks away with age). In some elevators there is a column of dust 60 feet high all around the bins. Fresh dust is not explosive, but old dust undergoes a chemical change and acquires an explosive property. This was the cause of the explosion at the North-Western Elevator, which was destroyed by fire, and a number of firemen killed. A number of elevators in this city are in this condition.

Referring again to the depreciation and estimate of cost of construction, elevator owners expect fire and most of them are ready with their proof of loss. Plans have been made and every piece of material, to the last bolt and screw, has been figured in at as high a price as possible, to be produced after the fire.

PHILLIPS & SHIVELY.

Phillips & Shively, who are successors by purchase, at Gibson City, Ill., of the Keiser & Holmes Elevator Co., have an exceptionally good location. All Illinois people know Ford County and that country of Central Illinois of which it is a part; its fertility is proverbial, and Gibson City, with its three railroads (I. C., Wabash and L. E. & W.), is one of the best of the smaller towns in that terri-



ELEVATOR PREMISES OF PHILLIPS & SHIVELY, GIBSON, CITY, ILL.

tory. As a town it has about 2,500 people, with a good high school, no end of churches and good gravel roads leading out into the country in every direction, all uniting to make it an ideal "country town."

The elevator in which we are at this moment particularly interested, that purchased recently by Phillips & Shively, from the Keiser & Holmes Company, handled during the last five crop years 1,380,000 bushels of grain. Its storage capacity is 60,000 bushels. Located to get I. C. track service, the elevator has two stands of elevators and four dumps, three of which can be used for ear corn and one for shelled grain only, the latter being the dump shown on the road level, on the left side of the elevator building. Being on surface level, it is very popular with farmers. The machinery consists of a Western Corn Sheller, Marseilles Cleaner, Boss Loader and 25-horsepower steam engine. The office building is 16x20 feet in size and has Fairbanks Platform Scales.

Peavey Grain Company unloaded at one of their elevators at South Chicago about Thanksgiving Day a carload of wheat which contained 115,970 pounds, or 1,932 bushels, 50 pounds, of the grain. The value of that one carload of wheat at Chicago was \$2,068.13, and the freight paid by the Peavey Grain Company from place of shipment was \$608.84. There is no previous record of the receipt here of any such quantity of wheat in one car.

A STORAGE DECISION.

The opinion of the Circuit Court at Salem, Ore., in the action of various farmers against the owners of the Salem Flouring Mills, to recover the value of grain "stored" in these mills when they burned, has been referred to in these columns before, but it will bear repetition, owing to the importance of the position taken by the court, sustaining, as it does, the opinion of courts in other states of substantially the same purport, thus adding precedent to precedent, until a definite rule will sooner or later be established as acceptable in all states without specific statutes governing this custom of the grain and milling trades. About 8,000 bushels of wheat were involved in this suit and the amount of the judgment against the Mill Company is nearly \$4,000.

The case turned upon the language of the load checks and receipt given by the Mill Company. The load checks gave merely the name of the farmer, the weight of the wheat, the number of sacks received and the number returned, and at the bottom of the check were the words "Not transferable." The checks were signed by an agent of the company, and it was the custom to issue to a farmer a receipt in the place of his checks whenever he re-

turned his checks and asked for the receipt. The receipt read as follows:

Received in store for account of John Doe — bushels of merchantable wheat, in bulk, subject to — order (damage by the elements excepted), on or before the first day of July next, on payment of 2½ cents per bushel storage and 3½ cents per bushel for sacks and the return of this receipt, properly indorsed, the wheat being deliverable on boat or cars, sacked. It is understood and agreed that the Salem Flouring Mills Company are to have the first refusal of said wheat.

SALEM FLOURING MILLS CO.

Bushels—

Per.....

It was the custom of the Mill Company, and was so understood by the farmers, to put all the wheat into bins in one mass and to sell and ship out any of the wheat desired, or to manufacture it into flour and ship the flour away, the Mill Company always keeping on hand a quantity of merchantable wheat to deliver to any of the farmers, or their assignees, who might ask for the amount of wheat specified by their receipts. Generally the wheat was paid for in money, but in some instances, it was paid for by the return of other wheat in its stead. Some of the farmers interested in this suit had received only load checks, while others had been given receipts in the form quoted above.

In September, 1899, the mill caught fire by some unknown means, there being no lightning or storm at that time that could have caused the disaster. The wheat in the mill was either destroyed or damaged so badly as to be unmerchantable. The Mill Company saved what wheat it could and sold the

same and offered to settle with the farmers by paying to each his proportion of the salvage, the amount being about 14 cents a bushel. Most of the farmers refused to accept this, but tendered the Mill Company the 2½ cents a bushel storage and 3½ cents for sacks, and demanded their wheat or the price at the time of the demand, 50 cents a bushel. Payment on this basis was refused and all the claims were assigned to G. O. Savage, who brought the suit.

Judge Burnett's decision is that in the transactions mentioned the Mill Company was not a warehouseman within the meaning of the statutes of the state, but the transactions constituted a sale of the wheat and the title passed to the Company. In deciding the case, Judge Burnett departed from the usual custom and filed an exhaustive opinion, setting forth the reasons for his conclusions.

The first conclusion reached was that the destruction of the wheat was not shown to be "damage by the elements" such as would excuse the Mill Company from the fulfillment of its obligations. The opinion makes a distinction between destruction by the elements, as in the case of a storm, and destruction by the element fire when some person has used that element as a means of destroying the property. It is held that the expressions "damage by the elements" and by the "act of God" are synonymous in cases of this kind, and that the act of God excludes the idea of human agency; hence the mere allegation of the Mill Company that the wheat was destroyed by fire and water is not sufficient to support a finding that it was a case of "damage by the elements," for the fire may have been set by some human being.

Upon the contention of the Mill Company that it was acting merely as a warehouseman and was therefore bound only to the exercise of ordinary diligence, and that in the absence of negligence its exemption from loss by fire arises by operation of law, the opinion says:

The law of this state (B. & C. Comp., Sec. 4602-4608) contemplates that grain deposited in a warehouse shall be kept there intact and shall not be shipped out without the written consent of the holders of the receipts, the issuance of which receipts is made mandatory by Section 4602. The testimony clearly shows that the defendant was continually changing the amount and identity of the wheat in its custody; that it habitually drew upon the common mass for its use in the manufacture of flour to be sold for its account, and that even at the time of the fire a large quantity of the wheat had been shipped to Oregon City, all without any written consent of the depositors as far as appears. Such transactions are not necessarily unlawful, but, according to State vs. Stockman, 30 Ore. 36, they are inconsistent with the relation of warehousemen.

Because the Mill Company had and exercised the right to change the wheat and sell it, paying for the same when demanded either in money or by delivering other wheat in its stead, the court holds that when the fire occurred the wheat was the property of the Mill Company and upon it the loss must fall.

CORN SHORTAGE IN THE EAST.

Local grain dealers in New England complain of an unusual shortage of corn, owing to scarcity of cars to get grain out of and east of Buffalo. Massachusetts dealers who buy of Buffalo houses have found it specially difficult to get corn, the price of which to local feeders has been eight to ten cents higher than normal. Oats are abundant, due mainly to large local crops.

Eastern Canada, notably Toronto, grain shippers also have had difficulty in getting cars as required, all available rolling stock of the transcontinental roads having been taken to Manitoba and the Northwest to move wheat to head of the lakes elevators, to get on board before lake navigation closed or to put the grain in store, it being anticipated that the Fort William room will soon all be occupied.

As a rule grain receivers on the Board of Trade generally commend the Western roads for the prompt service they are giving in handling the current large arrivals of corn. In former years there was always a great deal of complaint, but thus far

this season only one or two of the roads have been guilty of delaying business, and these delays were brief. In Michigan, however, there has been considerable complaint of delays—shipments being 12 to 15 days on the road, when a week would be more than reasonable.

In the Northwest the country elevators are generally full and most of them would be able to use more cars than they can get.

The Pacific Northwest still complains of car shortage for both westward and eastward movement, although the latter movement was supposed to be practically over by December 1.

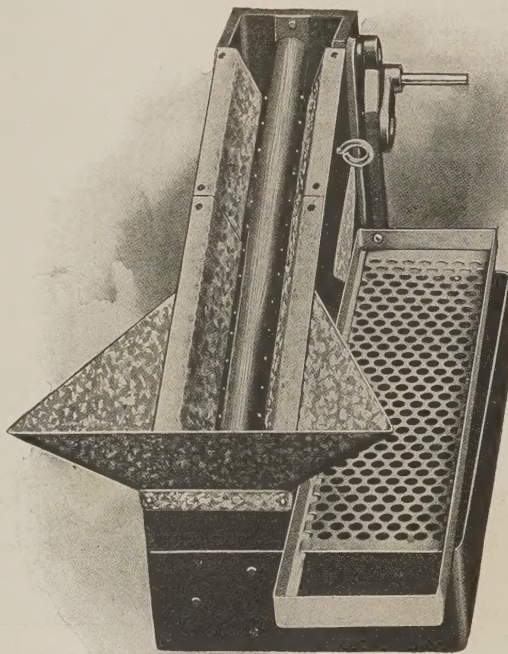
BARLEY IN WISCONSIN.

In a state of which brewing is one of the great industries, barley growing naturally should attract more or less especial attention; for Milwaukee has become one of the greatest, perhaps the greatest, primary markets in the country for that cereal. Wisconsin grain dealers, appreciating this fact and the importance of system in handling barley and in order to encourage state production of the highest grades of barley for malting purposes, re-

THE GRAHAM SEED CORN SORTER.

"When we consider that a bushel of seed corn ought to produce 400 bushels of corn, worth from \$130 to \$160, the serious nature of the question of perfect seed is very apparent," said Prof. Holden of Iowa. Leaving out of consideration at this moment all other questions regarding seed corn except uniformity of size of kernels, every well-informed farmer knows that when the grains are of a uniform size the planter will drop the desired number regularly and the result will be an even stand and an increased yield; it is not uncommon for the yield to be increased fifteen bushels per acre by even dropping by the planter.

One of the characteristics of the expensive, pedigreed seed corn is this one of uniformity, and yet many farmers, especially those who have bred good but not pedigreed corn, or dealers who are prepared to supply farmers with seed corn, would be able to deliver satisfactory seed, provided this characteristic were to be relied upon. Fortunately, this is now made easily possible by the use of a practical



THE GRAHAM SEED CORN SORTER.

cently adopted three standard grades based on type samples made by a committee for that purpose, from samples sent to them representing the barley of the various sections of the state. These type samples have this season been in the hands of country buyers and commission houses at Milwaukee, and the buying of barley at first hands has been chiefly on its merits by no less than 200 buyers. The system has been very satisfactory to the trade and will be beneficial to the state through its tendency to raise the grade at the farms.

Meantime, among the private experiments in barley growing in Wisconsin is that of the Uihleins of the Schlitz Brewing Company of Milwaukee, who own several farms in various parts of the state, whereon, at the suggestion of D. G. Fairchild of the U. S. Department of Agriculture, they have cultivated some ten different varieties of imported barleys, the seed of which came originally from Sweden, Norway, Munich, Spain, Cairo and Moravia. According to August Uihlein, President Courteen of the Chamber of Commerce and others, the results of these experiments have simply been wonderful; whether due to the combined climate and soil of Wisconsin or to the careful cultivation remains to be seen, for it is expected that most of the best barley grown this season on these farms will be distributed to barley growers in the state.

machine for assorting the grains manufactured by the Beall Improvements Co. of Decatur, and sold by all implement dealers. It is known as the Graham Seed Corn Sorter, and by its use a farmer can select seed corn from his own field, or a dealer can select from his stock, sound and tested seed, and with the sorter a boy can sort enough seed corn in one day to pay the cost of the machine, which in one operation removes the thin grains, the large grains, the round grains, the half-broken grains, and the long narrow grains, thus leaving corn of uniform size for the planter. Even after the butt grains and the tip grains are shelled off, this sorter removes a large number of grains that would absolutely prevent even dropping by the planter. Each grain is first sorted on edge to remove the thin grains and the large grains. Then the grains are sorted with a shaking screen, which removes the round grains, the half-broken grains and the long narrow grains. The corn which goes over the end of the shaking screen is seed corn of uniform size. Each grain is sorted on edge separately, thus limiting the capacity of the sorter. About one bushel per hour can be run through the smallest size and two bushels per hour through the largest size. The manufacturers furnish two sieves with each sorter. The sorter is very simply constructed and when once properly set for the size of grains desired for the

planter, there is nothing to do but turn the handle. It can be set instantly to sort any size grains.

The manufacturers will gladly furnish any additional information and prices.

IOWA CORN.

Director Sage has revised his earlier estimate of 300,000,000 bushels as the total of the corn crop of Iowa and now thinks it will reach 325,000,000 bushels, which at 40 cents is worth \$130,000,000. And Director Sage deprecates the American habit of exaggeration. "Exaggerated reports of the corn crop prospects are being circulated to-day," Mr. Sage said, "just as exaggerated reports of suspected shortcomings in the crop have been circulated from time to time in the past. The tendency to exaggerate is universal. Farmers exaggerate, grain men exaggerate and crop reporters exaggerate." And that's no exaggerated estimate.

And a writer in "World's Work," which has unfortunately the national exaggerating tendency to some extent, points out in a recent issue that the enormous corn yield for this year of grace 1904, which is, according to Director Sage, twice the average yield of the state per acre for the past fifteen years, is "due to the work of Prof. P. G. Holden." To this, barring the influence on the crop of good fall weather, grain men and farmers will agree, to the extent that the car-end missionary work for good seed done by Professor Holden last winter turned farmers' attention to the vast importance of sound seed, and so laid the sure foundation on which, thanks to a favoring and propitious season, this enormous cereal wealth has grown. And he has not ended his work on these lines. For next season he is already deep in the work of improving corn culture. In an article on "Iowa's Campaign for Better Corn," in the current Review of Reviews, he says, "If every ear of corn planted in Iowa this year had been tested in this manner, it would have resulted in an increased yield of probably not less than ten bushels per acre, or ninety million bushels." But there is still a higher standard of success. "The farmer who adopts better methods this year is not only a better farmer himself in the future, but his methods, directly or indirectly, soon become the methods of the community, and hence it is that such work cannot be measured to-day by bushels of corn or by millions of dollars. The agriculture of Iowa is in a developing, or formative, stage as yet, and practices are not crystalized. The farmers are largely recent comers from older states, where they have sold their high-priced land and bought the lower-priced land of Iowa. Awakened to the fact that the new conditions call for new methods, they are alert to every new idea that will increase the effectiveness of their labor."

This is sound doctrine; true always and universally applicable to corn culture.

Omaha began shipping corn to the Gulf for export on December 6. This is said to be the first year that grain has gone through Omaha to the Gulf. It is being shipped by Chicago houses acting through Omaha brokers.

A telegram from Old Town, Maine, says that "the managers of the grain elevators in Chicago and Kansas City have sent orders to the licensed guides of the Maine woods asking for as many live owls as can be captured and offering to pay one dollar or more for every bird which reaches its destination in good health. The letters say that the owls are for use in the elevators and store-houses where grain is kept, as it has been found that cats and ferrets in captivity are incapable of holding the mice and rats in check. Traps of many kinds have been tried without diminishing the number of the pests, which, it is said, destroy more than 2 per cent of all grains kept in storage. As it is impossible to strew poison among the grain, the dealers have appealed to Maine to send all the owls that can be taken alive." This sounds very like one of the late Joe Mulholland's "yarns."

FIRE HAZARD OF ELEVATORS.

Few elevator men will find it necessary to go outside of their own experience for proof that there is no greater fire hazard than that existing in and about elevators. How this important subject appears to insurance interests is shown by an article in Insurance Engineering, written by the manager of an insurance survey bureau. After describing an elevator leg and fixtures he says:

"The hazards of elevator legs are friction and the

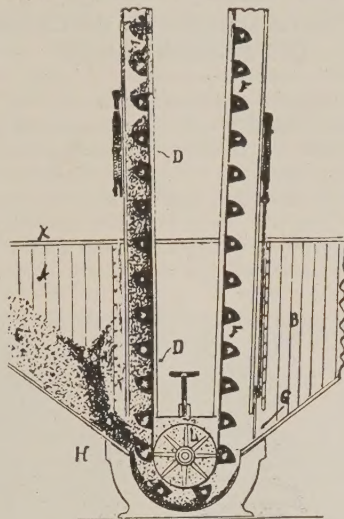


FIGURE 1.

fact that they are conveyors of fire as well as of grain. Friction may occur at the bearings, at the belt itself, and at the pulleys, and is causable in several ways. Bearings, of course, may be poorly babbitted or aligned, or may become covered with dust to such an extent that they are clogged. The belt in sliding past stationary objects with which it is in contact may produce enough heat to cause trouble. It may also slip on the driving pulley and start a fire in the same way, and, as the head of an elevator generally contains lint and bits of string hanging to splinters, nails, etc., as well as a feathery dust, a fire starting will almost surely spread. Slipping of the belt, in fact, is the most prolific source of fire in an elevator and is due most often to a choke in the boot.

"Chokes occur in two general ways: In the up-leg and in the down. Disposing of the latter first,

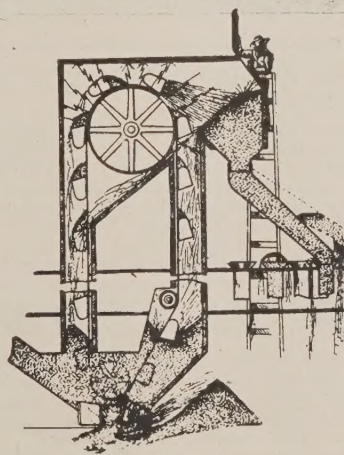


FIGURE 2.

it may be said that chokes in the down-leg are due to defective discharge spouts which may fill up and tail back into the down-leg, as shown in Fig. 2, or not catch the entire discharge from the buckets as they empty themselves. Chokes in the up-leg (Fig. 1) are due to many causes, the most common of which are slowing up of motive power, slipping of the belt, drawing from bins containing dry and damp grain, collection of grain on pit hoppers in drawing from bins, resulting in the sliding of the mass into the boot, and obstructions in the chutes carried there with the grain, such for instance as empty grain sacks, bunches of hay, straw, rags, paper, blocks of wood, etc. The writer has heard

of snakes, a farmer's dinner pail with the dinner in it, and a live goose being found in the spouts. Whatever the cause of the choke, it results in too much grain in the boot, and, as the belt cannot continue to move freely, the pulley turns under it, producing heat enough to start a fire. An unfortunate thing about such fires is that they ignite the leg from pit to cupola almost instantly, and the seat of trouble is difficult to locate.

"The pulleys themselves may cause trouble by turning on the shaft, if of wood (which should be prohibited), or rubbing against banked-up refuse where the head is not self-cleaning, as it should always be. Several devices have been used to prevent the accumulation of dust and other particles under the pulley, the most successful being the inclination of the strut-board so that it will be self-cleaning. This board should incline toward the up-leg so that whatever grain and dust slides down it will not have to pass between the belt and the pulley in the boot. A sort of hopper, spouting to one leg of the elevator, is sometimes used in place of an inclined strut-board, but it is not so good, being subject to clogging. Nor is the self-dumping, hinged and counterbalanced strut-board acceptable, as the mechanism gets out of order. Inclining the strut-board to both legs, making it appear like a peaked roof, is also undesirable, since part of the refuse will slide to the down-leg. Both the head and boot of an elevator should also be arranged in such a way that hand cleaning is possible in case of derangement of the other safety devices."

NATIONAL ASSOCIATION DIRECTORS MEET.

The directory of the Grain Dealers' National Association met in executive session at Chicago on Wednesday, November 30. There were present: President R. B. Schneider, Secretary Geo. A. Stibbens and Directors Jay A. King, Iowa; D. Hunter, Iowa and Missouri; W. S. Washer, Kansas; A. E. Reynolds, Indiana; H. S. Grimes, Ohio; H. L. Goemann, Toledo, and A. F. Brenner, Tri-State (Minnesota, South Dakota and Iowa).

The following are extracts from the proceedings of this meeting:

George A. Stibbens was re-elected secretary.

The president appointed a committee composed of H. S. Grimes, Jay A. King and H. L. Goemann, for the purpose of drafting a resolution protesting against the adoption of the uniform bill of lading. The resolution is as follows:

Resolved, At a meeting of the directors of the Grain-Dealers' National Association, this 30th day of November, 1904, that they voice the sentiments of the American Shippers' Association, in their action on the uniform bill of lading, and ask you to in every way assist them in their efforts to effect the changes they desire.

A copy of this resolution was directed to be sent to John M. Glenn, secretary of the American Shippers' Association; Frank J. Firth, chairman of the Uniform Bill of Lading Committee, and the secretary of the Interstate Commerce Commission.

It was decided by the directors to postpone the selection of time and place for the next annual convention to the next meeting of the board of directors, which will be held in a short time.

H. S. Grimes requested the endorsement of John B. Daish of Washington, D. C., for appointment as a member of the Interstate Commerce Commission, and the following resolution was unanimously adopted:

Resolved, That the directors of the Grain Dealers' National Association, at its session at Chicago, this 30th day of November, 1904, desire that Mr. John B. Daish be appointed to the office of member of the Interstate Commerce Commission.

Copy of this resolution was mailed to the President of the United States.

J. A. Radford and Charles Golding have organized a company at Houston, Texas, to grind red rice for stock and poultry food. It is claimed this product has a bright future and will be a great benefit to the rice industry of Texas.

NEW MODERN TILE TANKS AT ST. LOUIS.

The accompanying illustration shows the new tile tanks just completed by the Barnett & Record Company at St. Louis, for the Anheuser-Busch Brewing Association. The picture shows three styles of grain elevator construction and might be said to epitomise the progress in grain elevator building along the lines of fireproof construction during the last decade.

The house on the left in the picture is of wood veneered with brick. It was built several years ago and is fireproof on the outside, but could burn from within. The steel tanks, next view, were built four years ago.

The tile tanks, the most recent addition, are absolutely fireproof, and all the conveying machinery in connection is electrically driven. When it is considered that the tile used in the construction of the tanks requires 2,800 degrees of heat maintained for 36 hours to finish them, it is apparent with what

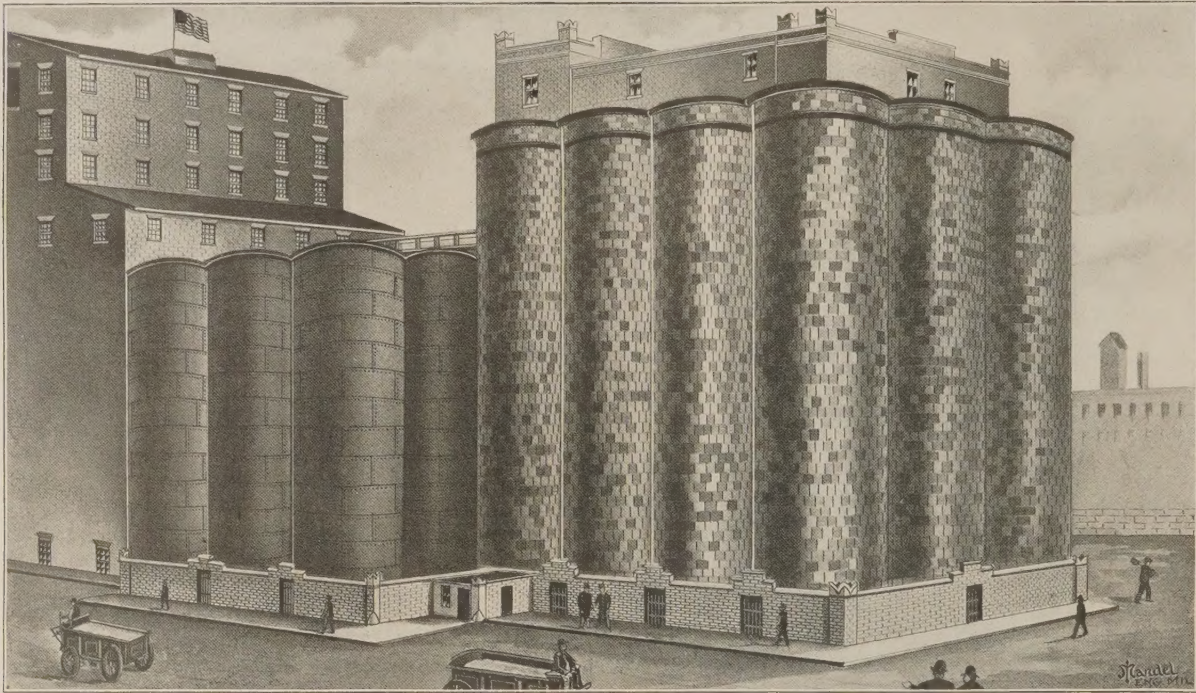
of drawbacks which reduced the tonnage to a considerable extent, but toward the latter part of the season navigation was better, and the showing for the year will be more favorable than was at first anticipated. The strike on the vessels operating on the Great Lakes, which began early in the spring and continued for several months, was responsible for the falling in canal traffic. It practically prevented all shipments from the West via the lakes during its duration.

THE PHILADELPHIA-BALTIMORE DIFFERENTIALS.

By a happy coincidence—if it were a coincidence—as a prelude to the resumption of hearing by the Interstate Commerce Commission at Philadelphia on November 21, on the West-to-East differentials in through freight rates, an internal commerce expert, Dr. John Franklin Crowell of the U. S. Department of Commerce and Labor, on November 19 published in the "Railway World" a

petition or as protests against the particular differentials as an equitable method of apportioning traffic. Nevertheless, no outside tribunal has ever been appealed to for a decision on the equity of the differential principle without approving its value as a working method and refusing to overthrow this, the only known expedient for preserving the balance of power among trunk-line railway competitors.

In general, New York represents the demand for a freer competition. The same may be fairly said of Boston, especially if grain receipts should fall off so much as materially to reduce the transatlantic freight tonnage from that port. Boston, as a port of exit, has resources in the Canadian grain supply. Philadelphia has most to lose from such a procedure, and hence represents the conservative course which experience suggests. Baltimore stands in the same category as Philadelphia, so far as insistence on the differential principle is concerned. In practice, however, Philadelphia has constantly complained of losing her grain trade between the upper and nether millstones of New York and Baltimore discriminations. Only by improving her terminal facilities on the ocean and by perfecting her connections on the Lakes has Philadelphia succeeded in holding her own and making any progress. Philadelphia has suffered along with



WOODEN ELEVATOR AND STEEL AND TILE GRAIN STORAGE TANKS OF THE ANHEUSER-BUSCH BREWING CO., ST. LOUIS.

difficulty they could be damaged by further burning. Their thickness also prevents heat from getting into the grain itself.

There are twelve circular tanks in all, each 21 feet in diameter and 100 feet high. Each has a capacity of 25,000 bushels of malt, making a total capacity of 300,500 bushels, including the six interstitial bins.

NEW YORK CANALS CLOSED.

The New York state canals were officially closed on November 26, although boats en route were granted permits and facilities to reach tidewater. The water was withdrawn from all levels not in use for that purpose on November 30.

The date of November 26 is one of the earliest on record for closing the canals; only three times in its history has the closing date been earlier. In 1880 ice closed the canals on November 21, and the official closing was on November 25 in 1838 and 1846, but never earlier than that. Last year the date of closing was November 30. The early closing is expected to afford opportunity for preparations for starting the work on the barge canal, which will be begun soon after the opening of the new year, and which will take over five years at the earliest to complete. The Erie and Champlain canals will be open to navigation during this period.

The past season of the canal has had a number

a review of the underlying problems of the controversy, in which he says:

The reappearance of the differential question by the second appeal to the Interstate Commerce Commission on the part of the cities of the Atlantic seaboard is but another in a long series of attempts to arrive at an equitable apportionment of competitive traffic, of grain especially, between the West and the East. The East-to-West differentials have a similar object. Apart from this purpose, these differentials have no reason for being. Yet continuous readjustment covering over a quarter of a century has been necessary to keep the principle in operation.

The New York Central reached Chicago in 1852, the Pennsylvania in 1858 and the Baltimore & Ohio in the fall of 1874. With the latest of these dates only did the differentials begin to take their present form. The contract of December 18, 1876, among the trunk lines, provided for fixed inland rates for domestic consumption and uniform through rates for foreign destinations, both rates to be based on the distance principle. The agreement of April 5, 1877, following its short-lived predecessor, gave to Philadelphia a rate of two cents per 100 pounds less than the New York, and a three-cent differential to Baltimore. It provided that to Boston the rates should not be less than the New York rate.

The principle of a fixed difference which thus came into use has survived to the present time. That it is now again called into question after twenty-six years of more or less irregular use speaks volumes for the vitality of the arrangement. But it is equally clear that, however vital the principle as such may be, it is far from affording a positive rule of practice. Its entire history has been punctuated with discriminations and rate wars, either as proofs of the necessity of resorting to freer com-

New York in more recent years by failures to observe differentials on the part of competing lines. As will be shown later, both Baltimore and Philadelphia built up their proportion of export grain business under the operations of the Joint Traffic Association (1896-1898), and New York lost.

The years 1896 and 1897 may be regarded as years in which the differential was enforced at its best; 1898 was a year of breaking away under discipline in self-defense against both associated and non-associated lines. New York began to lose rapidly, and has ever since been handling a diminishing proportion of the Atlantic and Gulf grain trade for export; Philadelphia and most of the ports south of New York profited greatly under the Association, and have, with the exception of the last two years, been able to maintain the advantages gained during 1896-1898. The effect of the regime of the Association was to swell the business of all Gulf ports.

In the period 1880-1887, the average receipts at both Philadelphia and Baltimore combined barely exceeded half of the receipts at New York, or a ratio of 5 to 10; from 1888-1895 the ratio stood 6 to 10, and during the period 1896-1903 the ratio had risen to 8 to 10. If the average annual receipts be represented by units of 25,000,000 bushels the relative standing of each of these three ports would be roughly as follows at the different periods:

Periods.	New York.	Philadelphia.	Baltimore.
1880-1887.....	5	1	1.6
1888-1895.....	5	1.2	1.7
1896-1903.....	6	2.1	3

Baltimore alone now handles half as much grain as New York on the average, and Philadelphia about one-third as much; but both combined do not as yet equal New York as a grain port.

New York now wants the differential abolished,

claiming that it has lost much export business because of its maintenance. New York had presented its case to the Commerce Commission weeks before, and at the hearing at Philadelphia the latter city only was able to present evidence, the hearing on behalf of Baltimore being postponed until January next, when the Commission will be in Washington for that purpose.

The hearing of November 21 opened with the conclusion of the evidence on behalf of New York, H. B. Chamberlain of the Erie being on the stand. He said the differentials were unfair and because of them New York was able to get grain for export only when the differential ports have been filled to their capacity. He thought, naturally, that "it would be a good thing for all four cities if the differentials were done away with."

The Philadelphians offset Mr. Chamberlain's testimony by introducing Secretary Saunders of the Commercial Exchange, who gave to the Commission a mass of statistics showing the exports from the ports of Boston, New York, Philadelphia and Baltimore for the last twenty years. These, with several maps defining the grain sections of the country, were filed as exhibits. The representative for Boston took exception to the figures concerning Boston, and succeeded in substituting statistics compiled by the Chamber of Commerce of that city. New York also claimed the tables are unfair.

Philadelphia also introduced F. L. Neall, senior partner of the export firm of Peter Wright & Sons, who testified that the differential rate is absolutely necessary for the maintenance of Philadelphia as a port of export for the future. He said that a differential was allowed to make up for the disadvantages of the port. He called the delay of Congress in deepening the Delaware River channel one of the greatest handicaps to the port. Because of the lack of business, every transatlantic steamship line has either reduced the number of boats operating between Philadelphia and European ports or has withdrawn from the business entirely. Ten times as many engagements for cargoes are offered steamships in New York as are offered at Philadelphia. Because of the narrow and shallow river channel, big boats can be operated only at a loss. In New York they find greater cargoes than they can carry. The Philadelphia railroads, the witness said, have not the facilities possessed by New York lines, and consequently bring less grain to Philadelphia than is sent to New York. He asserted that a secret understanding exists between the Buffalo and New York Produce Exchanges whereby shipments to New York are favored in filling orders. He further said that the actual cost of lighterage in New York is less than at Philadelphia; that no charge is made in New York for loading from barges, and that grain is kept in them for as much as four days at a time without charge; that elevator charges at New York have frequently been cut in two; that free fire insurance and free marine insurance are carried on grain at New York, while in Philadelphia a charge of three-fourths of a cent a bushel is made and no insurance is carried without additional cost. Altogether, Mr. Neall said, the saving to the shipper by sending his grain via New York amounts to about 2 cents per hundredweight.

On cross-examination, Mr. Neall admitted that if a tramp steamer is filled with grain from the chutes of an elevator, this service costs in New York 1¼ cents a bushel, but the witness asserted that this system is practically obsolete, as nearly all the grain is transferred to liners at their docks.

"If New York," asked Commissioner Prouty, "were to spend \$100,000,000 on the Erie canal, and as a result of this open an avenue whereby the great portion of the grain from the West would flow there, do you think it would be fair to have another readjustment of the rates so that Philadelphia would be able to compete?" The witness answered in the negative.

"What is the purpose of the differential?" asked Mr. Fairchild of New York.

"Its great purpose," answered Mr. Neall, "is to recognize the longer and more difficult ocean haul to Philadelphia."

Mr. Fairchild endeavored to draw an admission from Mr. Neall that the differential is entirely unfair to New York, but the witness insisted that without the differential the export trade of the city would be ruined. One of the reasons for the establishment of the differential, he said, was that the various ports might be placed on an equality and thus prevent rate wars.

Asked if Boston were not entitled to a differential Mr. Neall replied that the conditions in Boston were different. "There may be the same number of sailings from that port as from the port of Philadelphia," he said, "but Boston's tonnage is twice that of Philadelphia. Boston is an unknown quantity. She has lost to Montreal and not to Philadelphia or any other North Atlantic port."

The principal witness of the last day's session was Edward Francis, general agent at Chicago of the Allen line of steamships. Mr. Francis said that Chicago is the competitive point for grain shipments; that conditions relative to New York and Philadelphia in respect to obtaining freight, so far as the Allen line is concerned, are equal as to boats, sailings and tonnage. In making the through rate from Chicago to Glasgow, he said, the effect of an inland rate which is lower to Philadelphia and Baltimore than to New York is to enable his company to get cargoes for Philadelphia and Baltimore. Where the rates are even and the shipper

it does not govern. Hence local rates in this and other states are unreasonably high, as compared with the through rates from Chicago, Duluth and Buffalo.

The question also arises, Why should grain for export be carried at a lower rate than for home consumption? And why so much importance be attached to export business when it does not represent on the average more than one-tenth of our total grain products? To the writer it looks like an attempt upon the part of the transportation companies to divert attention from the more serious discriminations that exist in interstate rates and business. This week the writer had a car of wheat delivered at a Philadelphia rate point from Minneapolis (1,000 miles) on which a rate of twenty-five and one-half cents per 100 pounds was charged. Recently we shipped several cars of wheat to New York, on which nine cents per 100 pounds was exacted—a distance of less than 100 miles—and within a few days a charge of seven cents per 100 pounds was paid on wheat shipped from Philadelphia to a point not twenty miles distant. Our own people are more interested in equitable rates at home, and can have little sympathy with a policy that ignores those interests and fails to give the Eastern manufacturer, farmer and consumer the full benefit of his position and location.

EXHIBIT OF THE FOOS MFG. CO. AT ST. LOUIS.

We show herewith a view of the exhibit of the Foos Scientific Grinding Mills at the late Louisiana

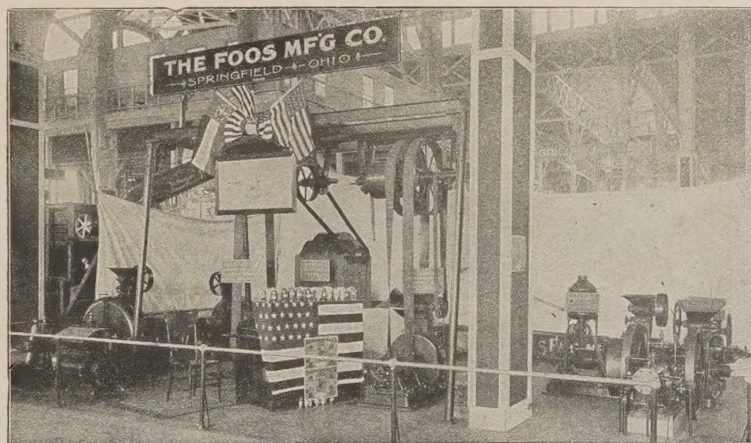


EXHIBIT OF FOOS GRINDING MILLS AT ST. LOUIS.

can send to New York as cheaply as to other ports, New York gets the business.

Chairman Knapp, addressing the witness, said: "As I understand it at Chicago you sell space on your steamers. If you need cargoes you can offer lower inland and ocean rates to and from Philadelphia." "That is correct. The shipper has the option of selecting Philadelphia with the privilege of the differential."

"Who gets the differential?" queried Mr. Pettit. "If freight is in demand the shipper gets it, but if cargoes are plentiful the carrier receives a portion of it."

Mr. Francis added that during rate wars the differential always obtains. There was a time, he said, when the railroads insisted on equal inland rates to all ports, and during that period the Allen line did not get any freight to Philadelphia.

As an interesting addendum to this matter there appeared in the Philadelphia Ledger of November 23 the following letter from Wilson Welsh of Hatboro, Pa., who says:

If it is not treason will you permit me to say that I think undue importance is being attached to the question of differentials between Philadelphia, New York and Baltimore now being considered by the Interstate Commerce Commission? The line of argument so far pursued does not certainly appeal to my mind. If the only reason Philadelphia or Baltimore has to offer for a lower rate on export grain than to New York lies in the fact that the expense of handling here is greater, and that because of our distance from the sea ocean freights are higher, then it would seem to me Philadelphia has no case. All that Philadelphia and Baltimore can in reason ask of the railroads is that they shall be accorded the full benefit of the shorter distance from the West, and that is the principle that should govern in all cases in fixing rates. Unfortunately,

Purchase Exposition, St. Louis, which was awarded the gold medal. This exhibit was in the Agricultural Palace and attracted a great deal of attention because of its scope—specimen machines of every kind from a sweep grinder for individual farm use to the largest grinding mills used in commercial enterprises, comprising in all over fifty styles, which have been developed by this company in its twenty-five years' experience as the manufacturer of grinding mills. The company has closely followed the development of the use of ground feed, the economy of which is now so well understood, being among the pioneers in building machines for grinding ear corn. From this the work of the company has extended to furnishing mills for grinding a great variety of foodstuffs and utilizing the by-products of many of the large milling enterprises.

A unique feature of the exhibit was the display, in the foreground, of one of the company's attrition mills fitted with its open-belt, reverse-drive countershaft, which is claimed to be the most convenient and economical method of driving this make of attrition mill. The company also showed, in combination with this, ear corn crushers of all sizes, from the small machine capable of handling only a few bushels an hour to the large machines whose capacity is rated in tons.

This company publishes several catalogues illustrating and describing these machines in detail. Our readers are invited to apply for these catalogues, as they contain much valuable information.

The company states that it was awarded gold medals at the Pan-American, Omaha and Chicago world's fairs, as well as at the notable exhibits in past years at Atlanta, Cincinnati and elsewhere.

FUNK BROS. SEED COMPANY.

The scientific farmer, the "book" farmer, as he used to be called, rather contemptuously, by the "practical" farmer, who might, perhaps, consent to consider suggestions about farming that he found half a century ago, in his weekly county-seat paper, and later in his weekly agricultural paper, although he might do so, as a rule, with that superciliousness which the horny-handed son of toil feels for the man who says he can successfully farm at all without making slaves of himself and his family—the "book" farmer, one may say, is at last coming into his own. His cotemporaries who have "never been to college" are beginning to recognize that all agricultural knowledge is not necessarily empirical only, but that some of it may find its justification in scientific concatenation, so to say. In other words, the "practical" farmer of to-day, who has his eye on the main chance, has his other eye on the experiment station and the private experimenters in similar lines. And therein the "practical" farmer shows his wisdom.

The Funk farms in McLean County, Illinois, which have been under cultivation, at least in part, since 1824, by the same family, have long been famous as the home of both theoretical and practical farmers—men who brought to their business

sorted and crated, after which it is hauled to the warehouse shown in the picture, which is the shipping house only, located at Funk's Grove station. The corn being shipped in the ear in crates, the purchaser is able to carefully examine every ear of it before it is shelled, and afterwards to again sort it by kernels. This system of shipping seed corn in the ear was originated by the Funk Bros., and it has proved very satisfactory to their patrons.

GRAIN IMPROVEMENT.

[From a paper read by E. E. Reindollar before the convention of the Pennsylvania Millers' Association.]

I have never been an advocate of what is generally termed book farming. Having been brought up in a farming community and guided almost entirely by the experience of those who have grown old in the work, I was slow to accept the many new ideas advanced by our agricultural colleges and experiment stations; but as we are living in a new era, it is natural that we should be filled with the same spirit of improvement found among those in other walks of life. Bankers, merchants, professional men and manufacturers of all kinds of machinery are always looking for something higher and better; they are looking for perfection in their particular line. Because of what they have done, and are now

a higher grade of wheat, and in the end benefit all who are directly or indirectly interested in this raw material? A miller can certainly obtain better results from sixty-two-pound wheat than he can from fifty-six-pound wheat. The elevator man would have no difficulty in placing his wheat, the farmer realize more money, the consumer will get a superior grade of flour, the housewife be satisfied and happy, and that alone means eternal peace, without which life is not worth living.

Accepting these facts as true, isn't it our duty to do away with and discourage the marketing of low-grade wheat for milling purposes? Some of you say it can't be done; circumstances compel us to take what we can get, etc. . . . Gentlemen, low-grade wheat for milling purposes must go, or the mill won't go. Choose ye whom you will serve.

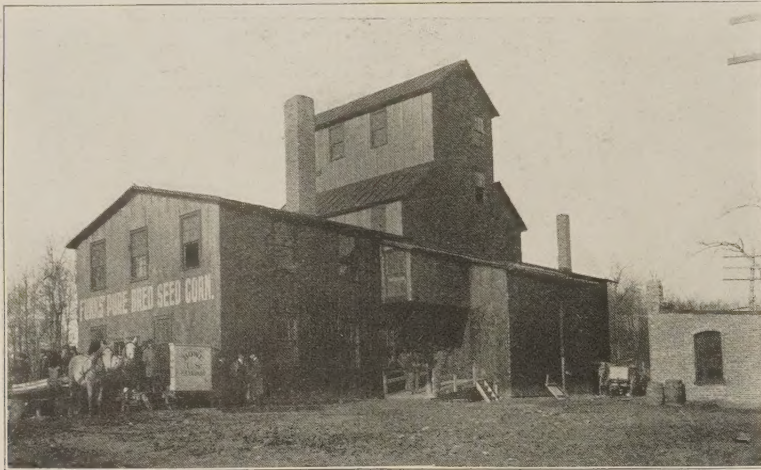
What kind of wheat should the farmer grow? This question may be answered in as many words as it takes to ask it. The kind which brings him the greatest profit.

Farmers who are systematically careful in selecting seed, and get that which is true to its kind, frequently obtain an extra price for their produce, as millers should always give a preference to clean samples and be glad to test the milling qualities of wheat, noting carefully every point, and give the producer the benefit of his experiments. In some Western states, wheat that is overripe, dead as we call it, is not wanted. Tests made by millers in different sections, noting carefully the relative ripeness of samples, has resulted in a strong preference for wheat not completely ripe, for milling purposes.

Before leaving the subject, we must refer to one phase of it that has not been touched upon—the changing of seed. There is no part of the United States where early maturing wheats are not desirable for one reason or another. The reasons are various in different localities. There are instances in which late maturity is apparently an advantage, but such cases are rare. To get just what is desired, and the best results, many believe in a change of seed. As we have a number of what is termed "best varieties," it is reckoned advantageous to have recourse to frequent change of seed, and in doing this to give the preference to that which comes from a soil or climate better and earlier than those of the locality in which it is sown. Certainly every farmer wants a seed that will take well with his own farm, and when once found, he wants to continue it so long as it is profitable.

An experienced farmer once remarked that by changing his seed he got it for nothing; that is, his crop was more abundant by at least the quantity sown, from the single circumstance of a suitable change of seed. Merely this saving of the best from which to grow better plants has caused great improvement not only in wheat, but in all crops. Wheat has been grown and cared for so long by man that it has lost its power of growing wild and would disappear from the earth if men should stop cultivating it. In Michigan there has been an energetic movement for a decade or longer to obtain hardy winter sorts, which has resulted in great improvement, not only for that state, but for adjoining territory. The millers of the state have been especially active in this movement, and the matter has been frequently a prominent topic of discussion at the meeting of the State Millers' Association. This is just the point I want to make, and the object of this paper will fall flat if I cannot awaken you to the fact that it is the miller who must interest himself and by his own effort, and that of the convention of which he is a member, keep his farmer friend thoroughly posted on every experiment looking to an improvement in grain, and while you aid him, your knowledge and experience will be felt in adjoining states.

While the large majority of farmers believe in changing seed, and have obtained good results, I have not found anyone who can explain the cause of it. A certain authority referring to change of seed has this to say: "It is proper, however, to state that this practice of changing the seed is founded more upon mere opinion than upon well ascertained facts, and that in those instances where it has been followed by beneficial results, nothing



SHIPPING ELEVATOR OF FUNK BROS. SEED CO., AT FUNK'S GROVE, ILL.

of farming not merely the empirical knowledge gained by hard knocks, but availed themselves of the resources of science and the accumulated results of the labor of students of agricultural science ever since there may be said to have been a systematic attempt to reduce agricultural knowledge to the form of a science. And so to-day this farm of 25,000 acres in one solid body is known all over the land as one of the greatest private experimental farms of the nation, standing in the fore as a producer of seed corn and oats, more particularly.

It is not the purpose here to go into a description of this great institution which has done so much to improve the breeds of corn and oats in the West, but only to remind the reader that a seed farm of 8,000 acres in corn and 3,000 in oats, which distributes annually thousands of bushels of the pure seed of these cereals, is a very interesting place, and, in view of the thought now being given by good farmers to the value of improved seeds, a most important one.

These farms, with their trial grounds, seed houses, chemical laboratory, etc., are located at Funk's Grove, on the C. & A. R. R., a few miles southwest of Bloomington, in which city the general offices of the company are located. Referring in the briefest possible manner to seed corn production, it may be said that in the husking season, the corn, as it is shucked each day, is unloaded by portable dumps into the cribs. Then the seed corn (of which this company is the largest grower in the world) is picked out from the mass, and taken at once to specially constructed seed houses, twelve in number, there to be thoroughly cured and dried. During the winter this corn is all again carefully

doing, I am pleased to endorse these colleges and experiment stations, and I believe it to be the duty of every miller to give them his hearty support and encourage them to still greater usefulness. These institutions are in a position to judge grain by its merits, and do not rely wholly upon its appearance. You can, if you will, profit by their experience and knowledge. They are to a certain extent supported by the states in which they are located, and all legislation that will affect them and foster the work now being done should have your hearty approval and support.

If the public press throughout the country, the business men, the manufacturers, manifest such deep interest, why should not we who are directly interested realize their usefulness and come to the front? Let us be progressive. The time-worn expressions, "reasonably clean," "reasonably free from moisture and other grains," mean one thing to you and quite another thing to the grower or seller. The old way of accepting everything that comes to please, to satisfy, must be abandoned and new rules adopted, rules that are made up of good, hard, common sense and business principles. Let there be a certain standard, one founded on reason, one that will not jeopardize your business or defraud the customer, and then stick to it. The miller, elevator man and farmer are close together, one dependent upon the other. The bulk of the wheat passing through our elevators must eventually go through the mills before it is ready for consumption. To whom must the miller look for his supplies, his raw material—to the elevator man? Yes. To the farmer? Yes. The interest of the one is certainly the interest of the other; they are almost identical; then why should not the miller encourage the use of

is known of the causes to which success is due." It is much to be desired that our agricultural societies and experimental stations should address themselves to the thorough investigation of a question of such vital importance.

In closing this paper I want to refer for a moment to your own state. I sent out a number of letters to millers in your state, each one going to a different county, with the express purpose of obtaining some information for this paper. With few exceptions they were answered to my entire satisfaction. These letters disclose the fact that the farmers are growing more careless in selecting seed, and while they are alive to the injury done by using imperfect seed, they do not seem to realize the extent of the evil and see clearly the loss they sustain personally. If the millers who kindly answered my inquiries suffered accordingly, they failed to make it known. It does not have to be answered by anyone; poor wheat makes poor flour, everything after its kind. While many of the dangers to crops cannot be avoided, it may be possible by care and foresight to keep clear of some which are commonly unnoticed.

The total yield of wheat in Pennsylvania in 1903 was 26,038,000 bushels; the estimated yield for 1904 is 20,000,000 bushels. This shows a loss for this year compared with last of 6,038,000 bushels. We might name you a number of supposed causes for this shortage, and show you that each county had its own particular trouble, but one fact stands out very prominently and applies to almost every wheat-growing county in the state, and the correspondence referred to will show that farmers are extremely careless in selecting seed; and just so long as they continue to select seed in this haphazard way, they must take their chances in getting a crop. I hope the time may come when we shall not hear of "Fair," "Prime," "Choice" or "Fancy" seed, but will read pure and germinable seed true to its kind, 60, 70, 80, 90 per cent or whatever percentage of good seed the sample is expected to contain. If fertilizers and numberless foods can be sold upon their analysis, why should not seeds of all kinds be subject to the same conditions?

Out of the 1,000 or more varieties of wheat known to the world, but few have had any standing in Pennsylvania and adjoining states outside of Fultz and a few other samples of smooth or bald wheat, and the bearded variety, known as Lancaster or Fulcaster. In 1862, in Mifflin County, Pennsylvania, Abraham Fultz, while passing through a field of Lancaster wheat, which is a bearded variety, found three heads of bald wheat. He sowed the wheat from these heads the same year, and continued sowing a larger amount each year, until he obtained sufficient seed to distribute it pretty well over the country. It soon became a well marked and popular variety, called "Fultz" from the name of the breeder, and is now the best known of American wheats. In 1871 the U. S. Department of Agriculture distributed 200 bushels of the wheat for seed. It comes nearest being a general purpose wheat of all our varieties, being grown with success in nearly all parts of the country and in several foreign countries.

Another of the very best varieties of this country, standing probably next to Fultz in popularity is "Fulcaster." It was produced in 1886 by S. M. Schindel of Hagerstown, Md., and is a hybrid between Fultz and Lancaster. It, too, is grown pretty generally throughout the country, but especially in the region from Pennsylvania to Oklahoma, including Tennessee and North Carolina. We might call your attention to other varieties, but these two being the most prolific in our territory, let us put forth every effort to have them developed to the highest point of perfection, remembering that plants are never still, but every crop differs in some particular from any other, and adapting themselves to their surroundings, the plants in different parts of the same field will show different characteristics or quality; such difference will enable the farmer to select the best seed for his coming crop. The Northwestern Miller tells us that careful tests have shown that only 5 per cent of the seed corn

that is planted from select ears will produce ears as good as the original, but by careful selective breeding, it has been found possible to raise the vitality of corn so that half the seed will produce the original. No such tests have been carried out in the breeding of seed wheat.

Important work has been done at the Minnesota Experiment Station, in the improvement of seed wheat, but the funds have not been available to make this work as careful and thorough as it should be. It would be worth to the American people the entire cost of a great exposition like the one that is now being held at St. Louis, if a real impetus could be given to the selective breeding of the most important cereal that is grown by mankind.

Go over these facts with the farmer, the producer. Enlighten him, give him the benefit of your tests and experiments; he will profit by them; our prosperity or adversity is a reflection of the prosperity or adversity of our customer.

Keep this always in mind: "The prosperity of the farmer is the foundation on which all prosperity is built."

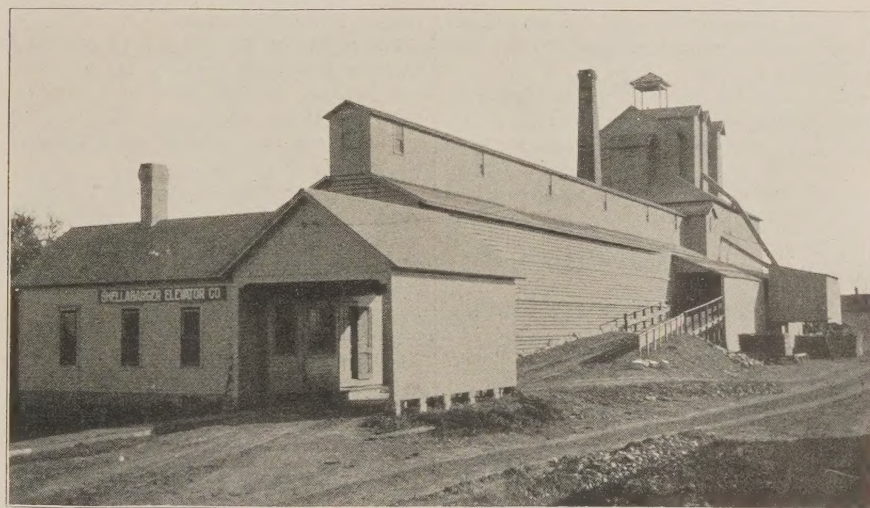
NEW ELEVATOR AT MAROA, ILL.

Maroa is a familiar name to Illinois grain dealers, not only because it has been the home of several executive officers of the Illinois Grain Dealers' Association, but because in proportion to

The house is so arranged that four different kinds of grain may be taken in at the same time without causing any trouble or inconvenience, or three different kinds of grain may be taken in and at the same time grain can be cleaned, weighed and loaded into the car. The capacity of the house for receiving grain is limited only by the ability to get wagons over the dump; and one day during last August 437 wagonloads, representing white and yellow shelled and ear corn and white and mixed oats, were received between 9 o'clock a. m. and 6 o'clock p. m., the aggregate receipts of the day being 23,000 bushels, and more could have been taken care of had it come in. Taking into consideration the size, condition and convenience of the plant in question, we may venture the assertion that it is the best country elevator in the state of Illinois, if not in the West.

The house is one of a line of fifteen houses owned and operated by the Shellabarger Elevator Company of Decatur, Ill., of which D. S. Shellabarger is president and W. L. Shellabarger secretary. The Shellabargers have been identified with the grain and milling business in Decatur, Ill., since 1856.

The Grain Dealers' Club of Cincinnati was organized on December 7, with the object of furnishing information to members of commercial abuses and to protect the trade against unscrupulous operators.



ELEVATOR OF THE SHELLABARGER ELEVATOR COMPANY AT MAROA, ILLINOIS.

its size it is one of the largest shipping markets in Macon County, or the corn and oats district of which Decatur is the center.

One of the several elevators of Maroa is the house owned by the Shellabarger Elevator Company of Decatur, shown in the accompanying engraving from a recent photograph. For the following description the editor is indebted to C. A. Burks, broker of elevators, etc., of Decatur, who says:

The main building of this plant is 40x40 feet on the ground, having a capacity of 85,000 bushels of grain, and is equipped with modern machinery throughout. It is operated with a 40-horsepower engine and 50-horsepower boiler. There are four legs of elevators, one No. 3 Western Sheller, two grain cleaners and six dumps, the capacity of the dumps being 5,000 bushels.

On the north of the main elevator is a large double crib 20x165 feet in size, holding 50,000 bushels of ear corn. This crib is filled from the dump, the corn being automatically fed to an elevator which discharges the grain upon a drag belt which distributes it wherever desired in the crib. Underneath the drag belt will carry the corn direct to the sheller, so that the grain may be taken out of the crib at any time it suits the convenience of the operators.

To the south of the main building is a large oat house with 50,000 bushels' capacity, which is filled from the main house by a conveyor and emptied with drag belts underneath.

The following officers were elected: President, Harry W. Hill; vice-president, Benjamin West; secretary and treasurer, H. B. Patterson; directors for two years, August Ferber and W. W. Granger; directors for one year, William H. Kramer and Anthony Heile.

Wichita has become a great broom corn center and the most important market for that product in the country within one year. Until the opening of this season Wichita was merely a local market for broom corn and handled less than many of the small country towns of Kansas and Oklahoma. At the beginning of this season, however, the American Warehouse Company began a wholesale business in broom corn there and has made Wichita the largest broom corn market in the country in a few months, having handled so far this season no less than \$350,000 worth of brush.

Receivers at Buffalo of grain from Port Arthur and Fort William complain of heavy shortage. What complicates the situation, so far as ascertaining who is responsible for the shortage, is the fact that at Fort William the grain is obtained from the C. P. R. elevators and at Port Arthur from the elevators of the Canadian Northern Railway, so there is no possible way of locating those who are responsible for the short weighing. A vessel which recently took on a wheat cargo at Fort William and Port Arthur found upon her arrival at Buffalo that she was no less than 2,400 bushels short of what her waybills called for.

URSUS ET LEO.

Do you hear the lion, O bear?
 He is roaring with all his might.
 Don't stir him up rashly. Take care,
 For he's rather rough in a fight.
 He's given to bluffing, no doubt,
 And ramping and charging about,
 But, bruin, you'd better look out
 When he stops his roaring to bite.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

LOSSES PROMPTLY PAID BY MUTUALS.

Editor American Elevator and Grain Trade:—Our opinion of mutual fire insurance companies is very favorable. Our transactions with them have been very pleasant. The insurance is less than in the line companies, and the settlement of losses has also in our cases proved very satisfactory.

We lost three elevators about two years ago, which were insured in the Millers' National Insurance Co., Indiana Millers' Mutual Fire Insurance Co., Millers' Mutual of Alton, Ill., and the Ohio Millers' Mutual Insurance Co., and the adjustment of our losses and the prompt payment of them was very satisfactory to us.

The cost of mutual insurance, if handled honestly, is certainly a great deal less than in the regular line companies, and these companies to which we have referred we place all our insurance with, feeling perfectly safe, and knowing in case we have a loss that the adjustment will be fair and payment prompt.

Yours truly,
 Pekin, Ill. SMITH-HIPPEN CO.

THE ONLY WAY TO CURB THE OLD LINERS.

Editor American Elevator and Grain Trade:—As a business proposition I consider mutual insurance of very great benefit to the grain trade, not only for the present, but for the future as well, for the following reason:

Some three or four years ago, when mutual insurance was not much talked of, the old line houses put their rate up to a very high mark, some of them actually saying they did not care for the business, but since the rise of the mutual companies they are all very well suited to have such business, and the rate has again been reduced, until, at present, we can have old line insurance at very nearly the same rate as the mutual.

As far as the mutual part of the new companies goes, outside of getting the insurance at a reasonable basis, I care not much and suppose most of the stockholders feel the same—simply wish to have it run on a safe basis.

Looking at it from all sides I cannot see how we can afford to drop our mutual companies, nor why any should wish them dropped.

Yours very truly,
 Bloomington, Ill. J. E. HAWTHORNE.

COMPARATIVE COST OF FIRE INSURANCE.

Editor American Elevator and Grain Trade:—We have a great deal of respect for mutual insurance companies that are made up of grain elevator and mill owners. Four years ago when the old line companies organized and adopted uniform rates on the different risks throughout the country, thereby increasing the cost of old line insurance 33 per cent, we began to study the virtues of mutual insurance, and we must say that we have nothing but good to speak of them.

Insurance that would cost us in the old line companies \$4.50 per hundred costs us in the mutual companies from \$2 to \$2.25. This means considerable of a saving to the average elevator owner.

There undoubtedly are some so-called mutual companies that are taking all classes of risks,

which might cause a man considerable trouble. But we note that none of these companies are ever able to get their advertisements in the "American Elevator and Grain Trade." And we think that no one would make a mistake in placing their insurance in any of the mutual companies that are advertising in your valuable paper.

Respectfully,
 Celina, O. PALMER & MILLER.

MUTUAL INSURANCE THE ONLY PROFITABLE KIND.

Editor American Elevator and Grain Trade:—I regard mutual insurance, under the present insurance conditions, as the only real profitable insurance for any line of business, providing it is the right kind of an organization. There are many so-called "mutual companies" that are not mutual at all, as between the parties having risks in such companies, but only a sort of stock company organized to compete with regular old line companies, and are much cheaper as long as all goes well. But when adversity comes, the policyholders find no one to fall back on. But a company in which each has a similar risk and where each is responsible for his share of the losses, and consequently equally interested in the safe conduct of his own business, so as to lessen the chances for loss, I think is the safest and best insurance there is. I think if I had any considerable number of risks at different places that I would carry them myself, having in that respect a mutual company of my own.

I have had to do with a farm mutual company carrying farm risks only. It ran for twenty years and promptly met all losses at a total expense of \$1.50 per \$1,000, except a policy fee of \$2, and I see no reason why it should not continue to do this for twenty years longer.

I think a mutual elevator insurance company along the same lines could be run at a proportionately low cost, taking into consideration the more extensive territory it would have to cover, and consequently more expense incurred in conducting same. Under present conditions regarding old line insurance, it does not seem to me that the grain trade can afford to carry the amount of insurance they ought to have.

Yours truly,
 ALBERT WEDGWOOD,
 Madison, S. D. Mgr. Union Grain & Seed Co.

PEORIA GRAIN WEIGHTS.

Editor American Elevator and Grain Trade:—Inclosed you will find copy of a circular letter issued by the committee on weights and measures of the Peoria Board of Trade.

Yours very truly,
 GEORGE A. STIBBENS,
 Chicago. Secy. G. D. N. Association.

To Grain Shippers: During this year the Peoria Board of Trade has put forth particular efforts to insure the correct weighing and the safeguarding of grain shipped to this market, and is gratified at the few complaints that have been made by the trade on weights that have been returned.

Notwithstanding the utmost care and vigilance, however, shortages will occur from causes beyond our control, but which can be largely overcome by a little extra care on the part of shippers to prevent loss of grain by leakage.

Our records show that 30 per cent of the leaks occur from defective grain doors. In the past few years the capacity of cars has been increased, but the doors furnished have not been proportionately strengthened; if anything the lumber is poorer, and it often happens cars arrive with the bottom door bulged out beyond the top boards, resulting in a bad leak. To obviate this we suggest that shippers nail a cross-board into each board of the door with slanting nails, the full length of the door and boards. This will require some extra work, but it will pay. Also board doors high enough, as in riding up and down grades grain will shift to the center of cars and unless they are boarded high enough there is a leak over the door. Where doors are unusually wide, never splice doors, as they generally arrive leaking. Better use lumber long enough. Batten all bad or wide cracks between boards and where doors are doubled up put the smooth sides together so there will be no space between the doors for grain to leak through.

We also have reasons to believe that cars often leave stations without being properly sealed, and shippers should see this is done. Where pins are

missing, nail a cleat back of the door with ten-penny nails or put a strong temporary pin in the staple. Unless this is done such cars are apt to arrive with seals broken and doors open, allowing free access to anyone.

All shippers should have their scales examined by competent men once or twice a year. The best times are at the beginning of winter and in the spring, after the frost is out of the ground and it is thoroughly settled. As a scale becomes old there are, if anything, more chances for a scale to weigh too heavy than too light.

Grain cannot be handled without some shrinkage. We are doing all we can to insure correct weighing and the yards are being patrolled at the expense of the Board of Trade to prevent stealing, and if shippers will co-operate with us to the extent as indicated above we feel certain the losses can be brought down to a minimum.

In conclusion we invite suggestions from the grain trade along these lines and will be glad to have them at any time.

C. H. FELTMAN,
 C. C. MILES,
 T. A. GRIER,
 Committee on Weights and Measures.
 Peoria, 1904.

STILL MORE TESTIMONY.

Editor American Elevator and Grain Trade:—We certainly agree with you that the fire insurance question is a very interesting one, and we do not hesitate to say that our experience with mutual insurance companies so far has been most satisfactory. Nor do we hesitate to say that we consider the plan a decided benefit, not only to the grain trade, but to other lines of business where the risks are small and scattering, and the management economical and honest.

You probably remember several years ago, when the board companies made a very radical raise in all of their rates, which practically prohibited our patronizing them. At that time we decided to open an insurance account for our different stations, intending to credit insurance account rather than pay the exorbitant rate, figuring that at the high rate, in consideration of the fact that our risks were decidedly scattered, it would be perfectly legitimate for us to carry the risks ourselves, provided we could not secure the insurance at a reasonable rate. By looking around we found we had no difficulty in doing better than the published rates, for which reason we were never able to carry any of our own insurance. At that time we began to make use of the mutuals more freely, placing quite a considerable business with the Millers' National of Chicago, who write their excess lines with other mutuals, such as the Michigan Millers' and the Millers' Mutual of Alton, Ill., whose premiums were supposed to be about an equitable charge, with the understanding that their assessments generally averaged about 50 per cent, so that the real cost would not be much more than half of an average charge.

Later, with several others, we were instrumental in starting the Grain Dealers' National Mutual Fire Insurance Company of Indianapolis, Ind., which is now growing and apparently in successful operation, and is practically an offshoot of the Millers' National of Chicago, in whose employ Mr. C. A. McCotter, our present secretary, was for some time. Would suggest you have a talk with Mr. Dinsley, of the Millers' National in Chicago, with whom we have had extensive dealings personally, as we are satisfied he can come as near giving you a correct explanation of their methods as anyone, and can show you the comparative cost of insurance in the board companies, and at the same time demonstrate that his company is growing stronger all the time. It will not be difficult to prove that a large part of insurance as a rule, whether fire insurance or life insurance, goes to pay exorbitant salaries, expenses and commissions.

As an example of successful mutual fire insurance, we would mention the North-Western Lumberman of Minneapolis, a company which takes nothing but retail lumber yards—another example where the insurance of scattered small risks is a success by honest and economical management. Another case is that of the Farmers', in this locality, in which we have some farm buildings insured,

which carries nothing but farm buildings, and in which our assessments are surprisingly low. At the same time, the indemnity is as good as any.

We can only repeat that our experience in mutual fire insurance is entirely favorable. The writer is also insured in the Bankers' Life of Des Moines, Iowa, which is most satisfactory so far, owing to "economical and honest management."

Yours very truly,
Springfield, Ill. E. R. ULRICH & SONS.

SATISFIED—A TEST OF MUTUAL INSURANCE.

Editor American Elevator and Grain Trade:—For the past several years we have been a patron of mutual fire insurance companies to a certain extent and have given the matter of insurance considerable study, and we feel very friendly toward the mutual companies. While all our insurance has been good from our standpoint, as we have never had occasion to collect a loss, never having had a fire, the mutual companies have been doubly agreeable, as their annual premiums have figured about 60 per cent of the old line companies, and from the best information we can command, the better class of mutual companies are as prompt in paying their losses as the old line companies are.

One test that we have always exacted of the mutual companies which we patronize was that they should not knowingly insure mill and elevator property which was in bad repair or not-profitable. We consider a risk which is slovenly used and carelessly managed a great moral and physical hazard, and any company that will solicit and write a risk of that kind is either unfair or incompetent, consequently dangerous.

Yours truly,
Keokuk, Ia. O. A. TALBOTT & CO.

MUTUAL FIRE INSURANCE IN THE NORTH-WEST.

Editor American Elevator and Grain Trade:—Relative to the subject of mutual fire insurance, as pertaining to the grain business, we beg to say that our experience along this line is somewhat limited, but for the benefit of whomsoever it may interest, would say that we are at present interested in strictly mutual fire insurance operating in Iowa, Minnesota and South Dakota.

It is virtually an association, as the organization is not incorporated. It is made up of a number of firms and companies owning country elevator properties in the states named. The risks are carried on basis of regular rate charged by the line companies. At the end of the season, after deducting losses and expenses, the surplus, if any, is returned to the stockholders.

The first season our losses were nil. The only deductions were on account of expenses, and these were very low; consequently the dividend which was returned to us and which applied on the succeeding season's business was almost 100 per cent. The second season we had several losses, so that the returns were about 50 per cent. This experience is hardly sufficient to justify us in saying that this will be an unqualified success, but we know of no reason why a mutual company, organized along proper lines, with a competent man at the head to conduct the business properly, should not be able to return to the insured at least 50 per cent of any dividends which may be collected, on the basis of rates as at present assessed by the regular insurance companies.

The association in which we are interested is really an experiment, and according to our ideas should be regularly incorporated and have a capital stock, so that the responsibility of members will be limited to the amount of their subscription. We feel that ultimately action of this kind will be taken.

Where proper precautions are observed, the risk on country elevator property is not much more than nominal. Of course, these remarks do not apply to terminal elevators and we are not prepared to recommend mutual insurance for large terminal elevators, unless a mutual company of sufficient

strength and standing could be organized to carry the greater risks involved in this class of business.

Yours very respectfully,
D. ROTHCHILD GRAIN CO.
Davenport, Iowa.

AN ENTHUSIASTIC SUPPORTER OF MUTUAL INSURANCE.

Editor American Elevator and Grain Trade:—I am glad you have interested yourselves in the subject of mutual fire insurance for country elevators. I admit some hesitation and that I was slow to jump into mutual insurance, but prior to the organization of the Grain Dealers' National Mutual Fire Insurance Company, the stock companies kept advancing the rates on country elevators so sharply that either a remedy was obligatory or we would have to give over most of our earnings to stock insurance companies.

The advance in rates by stock companies two years ago was one of the most radical and unreasonable that has ever been inflicted on grain men, and there was no recourse possible for us but to accept any conditions imposed by them. We, therefore, took hold of the Grain Dealers' National Mutual Fire Insurance Co. as a matter of self-preservation, and our experience with this company, and with the other companies co-operating with it, has been satisfactory. Since the organization of the Grain Dealers' National Mutual Fire Insurance Company, the old line companies have appreciated, somewhat, its influence, and have, within the last six months, reduced their rates to about the old figures that were in effect prior to the organization of the mutual companies.

There seems to be no question that the future of the grain trade, as regards insurance, will need the competition of a good, mutual company, because such a company will always be in closer touch with the real interests of elevator owners than any other insurance company. Their specialty work of frequent inspection will have a tendency to improve the general character of country elevators, so that the loss ratio will continually grow less instead of greater. This will enable mutual companies to declare better dividends; and if the stock companies keep up with the procession, they will have to reduce their rates still farther to meet the specialty work done by the Grain Dealers' National Company. Should competition be shut off, and the mutual companies go out of business, it does not take a very smart grain man to predict what kinds of rates the old line companies would make.

I am, therefore, in favor of supporting, to a considerable extent, the Grain Dealers' National Mutual Fire Insurance Company and its co-operating companies, and believe that 90 per cent of the country grain dealers are in sympathy with the good movement, already a success in fire insurance.

Kankakee, Ill. R. G. RISSER.

OPINIONS ON MUTUAL FIRE INSURANCE COMPANIES.

SCHULTZ, BAUMAN & CO., millers, Beardstown, Ill.: We consider mutual insurance companies a very good thing for the manufacturing trade. The Millers' Mutual has proven very successful and has been a great saving for us millers.

J. N. HAIRGROVE, Virden, Ill.: My experience with a mutual fire insurance company has been very satisfactory, and my opinion is that the mutual companies are a good thing, for the future as well as the present, and the thing for all of us. I want no other insurance.

TINGLEY BROTHERS, Columbus, O.: We are very well satisfied ourselves with the experience we have had in mutual fire insurance companies. We carry quite a large line of insurance at our various places, and place every dollar we can in them, but, of course, we are compelled to put some insurance in old line companies because we cannot place all our lines in the mutuals. There are not enough to go around.

SUFFERN, HUNT & CO., Decatur, Ill.: We have not given the question of mutual insurance sufficient thought to render an opinion that would be

worth anything. Fundamentally we are firm believers in insurance of all kinds. Our experience with mutual companies has been very satisfactory and has effected us considerable saving, but an insurance company is like any other business—its success or failure depends entirely on its management.

G. W. WARNER, Pickrell, Neb.: I am very well pleased with the mutual fire insurance proposition, as evidenced by my availing myself of its benefits, and I expect to continue to do so.

R. TURNER & SON, Avery, O.: We can say that we are very well pleased with our insurance in the new grain dealers' mutuals, and want no more old line insurance at stock company rates.

SHAW GARNER CO., Rockport, Ill.: We consider the mutual fire insurance companies a good thing for us, judging from our experience in the past and at present. If conducted as at present, we think they will prove all right in the future.

THORN & SHINE, New Albany, Ind.: We consider the mutual fire insurance plan a good one, and we intend carrying the bulk of our insurance with the mutual companies in the future.

VANDEBURGH BROS., Blackwell, Okla.: You ask us, do we, as a business proposition, regard the mutual fire insurance companies as a good thing for the present and the future of the grain trade? In answer would say that we certainly do. At the present time, we are insured in two mutual companies and find same to be far superior to any other organization in which we could insure our property.

L. ROSENHEIMER MALT & GRAIN CO., Kewaskum, Wis.: In regard to the mutual fire insurance companies would say we think them a great benefit to all business men, their competition with the stock companies prohibiting the latter from raising their rates to an enormous figure.

J. W. OWENS, Saratoga, Ind.: I have been engaged in the grain business for sixteen years. Never have been as well satisfied with my insurance as I am at present. The mutuals are my choice—for the present and the future, first and last.

NORTH-WESTERN ELEVATOR & GRAIN CO., Peoria.: We regard mutual insurance a good thing for the present and the future of the grain trade. In fact, we think it is the only way of handling insurance on country elevators. All of our elevators are insured in such companies, and we would not think of going back to the old way of placing insurance at high rates with the old line companies.

E. A. RIPPE, Madison, S. D.: This question of fire insurance is getting to be a serious one, and the only remedy, according to my view, is mutual.

H. L. STRONG GRAIN CO., Kansas City: As a business proposition, all things considered, we most certainly do regard the mutual insurance companies now handling business for the grain dealers, both for the present and the future, a good thing. By looking back over the history of these mutual companies, handling business for the grain elevator and mill companies, we find a saving of from 30 per cent to 40 per cent, which certainly looks like a business proposition to us.

THESE ARE NOT EXPERIENCED.

RUDY & CO., Paris Ill.: We have not investigated the matter of mutual fire insurance sufficiently to give an opinion. However, we are inclined to think some of the mutuals are all right.

HENRY RIPPE, Fairmont, Minn.: In regard to grain dealers' mutual fire insurance, would state that as yet I haven't had any experience, as, as long as I have been in business, I have had my insuring done by the old line companies, so am not in a position to give an opinion.

OBJECT TO MUTUAL INSURANCE.

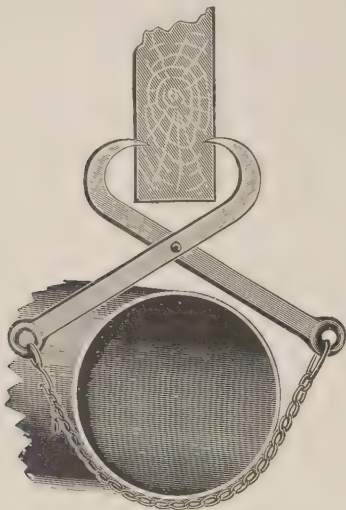
J. T. STARK GRAIN CO., Plano, Texas: We have had no experience with the mutual insurance companies. We have always preferred to keep our business in the old line companies, where we knew that from a liability standpoint we were sure to get our money in case we have a loss. In fact, we do not feel very favorable toward mutual com-

panies. However, we will say that most of the flour mill risks in Texas are written by the Mutual Fire Insurance Company of Texas. If the grain trade could be handled by a company or companies along the same lines of this company, we would have no objection to placing our risks with them.

PACIFIC COAST ELEVATOR CO. (per vice-president), Portland, Ore.: We are not in favor of mutual fire insurance. The writer formerly had some experience with such companies in the East, and it was such that we now prefer the old line companies.

A TIME SAVER.

On making a call on the Burrell Manufacturing Company at Bradley, Ill., recently and looking over some of their improved machines for handling grain, the writer's attention was called to a small article that the company claim to have sold a great number of, and which is just a simple device to hold the loading spout rigidly in the car with-



A SIMPLE TIME SAVER.

out the aid of nails or any other method or device. As will be noted from the cut, this device is nothing more nor less than the original ice tongs with a dependable chain. All there is to be done, on placing the spout in the car, is to slip the chain around the spout and place the ice tongs so as to catch the rafters of the car at any desirable point.

One thing is certain about this novelty: One can see at a glimpse its merits. There are no breaking cords, no hunting of wire or nails or coupling pins to fix the loading spout at any desirable point in the car.

The Burrell Mfg. Co. inform us that they have a great number of these spout hangers in use and that they are giving so much satisfaction that they are willing to send them to anyone desiring a set on trial.

RUSTED GRAIN AND STRAW.

Professor Shutt, of the experimental farm at Ottawa, Ontario, having made chemical analysis of rusted wheat to ascertain the effects of rust upon the grain, has made his patron, Sir Wm. Van Horne, a report in which he says:

"The rusted grain, which was much shriveled, had a dirty greenish-brown appearance; and, taking an equal number of kernels, was only half the weight of the unrusted sample. With the exception of a slight increase in protein and some of the other constituents that predominate in the bran, the composition of the rusted grain differed but little from the other.

"The marked increase in the nutritive value of the rusted straw was the most important fact brought out by the analysis. It contained 7.69 per cent of protein, and the normal one only 2.44 per cent. It is thus seen that the rusted straw is three times as rich in this—the most important constituent of nearly all foods—as the normal straw. It

also contains more fat. These facts afford a very good explanation of the preference that cattle have for rusted straw."

THE PRESIDENT AND THE COMMERCE COMMISSION.

The issue between the transportation companies and the shippers is now fairly joined on the question of enlarging the powers of the Interstate Commerce Commission and restoring to the Commission the powers it exercised for some years after its creation. The President has taken up the subject, and in his last Message to Congress makes the following recommendation:

Above all else, we must strive to keep the highways of commerce open to all on equal terms; and to do this it is necessary to put a complete stop to all rebates. Whether the shipper or the railroad is to blame makes no difference; the rebate must be stopped, the abuses of the private car and private terminal track and sidetrack systems must be stopped, and the legislation of the Fifty-eighth Congress, which declares it to be unlawful for any person or corporation to offer, grant, give, solicit, accept or receive any rebate, concession or discrimination in respect of the transportation of any property in interstate or foreign commerce whereby such property shall by any device whatever be transported at a less rate than that named in the tariffs published by the carrier, must be enforced.

For some time after the enactment of the act to regulate commerce it remained a mooted question whether that act conferred upon the Interstate Commerce Commission the power, after it had found a challenged rate to be unreasonable, to declare what thereafter should, *prima facie*, be the reasonable maximum rate for the transportation in dispute.

The Supreme Court finally resolved that question in the negative, so that as the law now stands the Commission simply possesses the bare power to denounce a particular rate as unreasonable. While I am of the opinion that at present it would be undesirable, if it were not impracticable, finally to clothe the Commission with general authority to fix railroad rates, I do believe that, as a fair security to shippers, the Commission should be vested with the power, where a given rate has been challenged and after full hearing found to be unreasonable, to decide, subject to judicial review, what shall be a reasonable rate to take its place, the ruling of the Commission to take effect immediately and to obtain unless and until it is reversed by the court of review.

The government must in increasing degree supervise and regulate the workings of the railways engaged in interstate commerce; and such increased supervision is the only alternative to an increase of the present evils on the one hand or a still more radical policy on the other.

In my judgment the most important legislative act now needed as regards the regulation of corporations is this act to confer on the Interstate Commerce Commission the power to revise rates and regulations, the revised rate to at once go into effect, and to stay in effect unless and until the court of review reverses it.

Steamship companies engaged in interstate commerce and protected in our coastwise trade should be held to a strict observance of the interstate commerce act.

This part of the Message at once attracted the attention of the transportation as well as of the Commerce Commission. Certain members of the Commission at work in Chicago when the Message appeared were interviewed.

Commissioner Prouty said:

The monopolistic railroads are the mother of all monopolies. They exact more tithes from the people than all the other monopolies combined. It is well that the President should recommend the regulation of their rates. He will be warmly commended by the business world for the stand he has taken in the matter. He also does the proper thing in recommending the granting of larger authority to the Interstate Commerce Commission. As it is now, our powers are limited to an embarrassing extent.

Commissioner Clements said:

There is a rapidly growing necessity for the actual control or regulation of that which is generally in dispute—freight rates. Nearly everything has been regulated except the most important thing, and that is the rate. During the last year for which we have full statistics, which was 1903, we find that the railroads collected in rates, in round numbers, \$1,900,000, a sum equal to the entire value of the exports of the country and the

total receipts of the government from all sources combined.

It is to be supposed that in the adjustment of rates producing such results there are some rates in violation of the requirements of the law where they should be reasonable and just. It has been said that the interests of the shippers and the railroads are so much in harmony that the shippers have relied on the carriers to do that which is just and reasonable because it is to the interest of the carriers to do so, protecting their patrons in their own interests. But it is not safe to rely upon the interests of one man to properly protect the rights of another.

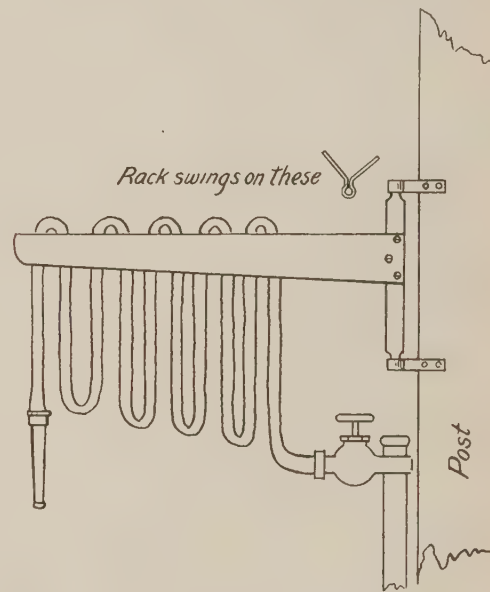
Railroad men interviewed at Chicago almost to a man said the transportation interests will oppose granting to the Commission power to make rates, and their spokesman in general, Slason Thompson of Chicago, of the Railway News Bureau, said:

As a matter of fact the President has been misinformed by the Interstate Commerce Commission, which has been striving to secure the rate-making power for twelve years, and its rulings on what are reasonable rates have been reversed in 90 cases out of 100, thus showing that the Commission, as at present constituted, is unfit to be intrusted with any such authority, even if it were constitutional.

A CONVENIENT HOSE RACK.

For hose that can be doubled the rack shown herewith is very handy. It can be placed in almost any convenient spot and will swing around in any direction the hose is pulled. If desired, the rack may be located near the ceiling so that it will be out of the way. All that is necessary is to have the nozzle within easy reach. According to a writer in the Wood-Worker, the cost of such a rack is trifling and anyone can make it.

It is really a swinging double bracket, about 3 feet long, with the sides far enough apart to allow the hose to pass freely between. The hose is looped over 7x $\frac{3}{4}$ -inch half-round sticks and hangs between these arms. Referring to the drawing, it will be seen that the arms are smooth on top. In case the hose is wanted, all that is necessary is to



A CONVENIENT HOSE RACK.

grasp the nozzle and walk away; the hose will come off nicely enough to please anyone. The capacity of the rack depends upon the length of the arms and the length of the loops.

A grain thief was arrested at Cincinnati the other day in the act of taking oats from cars loaded by the Union Hay and Grain Company, which he afterwards delivered to a coal dealer, who thought he was buying from the Union Company.

The Minnesota Grain Commission has issued licenses to 1,609 grain elevators in that state, not including any application from the new territory opened by the Soo's Winnipeg line. The total number of licenses issued this year is expected to be about twenty more than last year, which showed an increase of thirty-five over 1902.

COMMERCE COMMISSION HEARING ON THE UNIFORM BILL OF LADING.

When the hearing by the Interstate Commerce Commission on the complaint filed by the Illinois Manufacturers' Association began, on Monday, December 5, at Chicago, Mr. Firth, chairman of the Uniform Bill of Lading Committee, and the railroad attorneys present, professed a profound ignorance of the difficulty. "What is it all about?" they asked. The uniform bill of lading, they said, and all its provisions of limited liability, or 20 per cent advance in rates for unlimited liability service, or insurance for safe delivery, have been in full force and effect for more than ten years. There is absolutely not one thing new in the uniform bill, they declared repeatedly, that the public has not had notice and knowledge of during all those years. The only possible point at issue now, Mr. Firth declared, in substance, was the desire on the part of the railroads in official classification territory to unify their B/Ls as to size and textual form and put into the bill itself specifically those features of limited liability under present rates, or a 20 per cent increase for unlimited liability service, which have been a part of all B/Ls in use by all the roads for years past, which have contained, as a part of their conditions, a reference to the "conditions of liability named in the official classification," "which see," or words to that effect. Before the end of the three days' hearing of shippers' testimony, however, the railroads' representatives were routed from this position, "horse, foot and dragoon." It was shown beyond even attorneys' cavil that, while this was nominally true, and not wholly so, even nominally, yet the public never so understood the situation, and the roads themselves never in all their immense dealings with the public have done one act to lead shippers to understand or suppose that they, the railroads themselves, so understood it, and were not doing all their carrying business on the basis of common law liability bills of lading. They have never asked shippers to pay the higher rate for a "clean bill of lading;" they have never resisted a shipper's claim on the plea of no liability under their bills of lading, but have invariably paid all claims for loss and damage that have been reasonably well established. In short, the plea of Mr. Firth and his counsel, Mr. Russell, that shippers have had notice of the roads' limited liability and knew the roads were not liable for loss or damage, and that they were shipping under those conditions of no liability and did not care enough for unlimited liability service to ask for it, was shown to be merely a legal quibble so far as the roads themselves were concerned, and that it is a fact that the shipping public has had hardly even constructive notice to that effect.

The Commission was represented by J. C. Clements of Georgia, presiding, Charles A. Prouty of Vermont and Joseph W. Fifer of Illinois. In opening the hearing, Attorney Levy Mayer, for the Illinois Manufacturers' Association, speaking to the matter of the 20 per cent increase proposed to be charged for common law liability service, said that the railroad income for a given year (1902-3) was something like \$1,500,000,000, of which the roads returned to shippers as compensation for loss and damages to goods in transit about \$13,000,000, or less than 1 per cent of their income from freight. The natural inference is that an arbitrary increase now of 20 per cent in rates as an insurance charge, or to pay loss and damage claims, is unjust and must have a "speculative" purpose. Mr. Mayer then attacked the carriers' purpose to mark the uniform bill "not negotiable" as one fraught with immense evil to a vast number of shippers, those especially handling agricultural products and their products, and perishable goods of all kinds. He presented in quite strong terms the confusion this unnecessary feature of the bill would create in the customs of trade and commerce and in the relations of shippers to bankers

by arbitrarily throwing a cloud on the character of a vast amount of commercial paper, the use of which is absolutely essential to the free conduct of commerce between the states, and especially that in which a vast number of persons and firms of comparatively limited capital are engaged.

Mr. Mayer conceded that the uniform bill has been in operation tentatively, or constructively, for some years, but he insisted that its provisions have never been enforced by the roads, and that the roads have never made question of their common law liability on the B/Ls they have issued in the past. He further showed that there is now no possible excuse for a further increase in rates, because railway income is ample to pay liberal dividends on all railway capital stock, and to an amount beyond what is legitimate for property clothed, as railway property is, with the public use. Furthermore, the greater charge for the greater risk already exists in the rate, being made by the classifications and also by the difference in carload and less than carload rates. The railroads have gradually been absorbing public rights by evolution, and now it is time to call a halt. This the Commission has power to do; at any rate, under the Elkins law it has power to prevent the discrimination in rates which the new bill creates, since the small shipper, in order to get insurance, would have to pay the higher rate, while the big shipper would pay only the lower and so gain an advantage in their competition.

Mr. Russell, of the Michigan Central, and counsel for Mr. Firth, replied to Mr. Mayer in a brief statement: "I can't quite understand the issue here," he said. "There is no issue, in fact, between us as to the desirability of a uniform bill of lading that shall be the same for all shippers and put an end to the discriminations the law says the railways shall not make. So," he said, "a uniform bill of lading was drawn up fifteen years ago by the big trunk lines. It fairly represented the rights of the shippers and of the railroads. It seemed to suit everybody concerned, and has since been in general use. Recently complaint came that some of the sections in the bills of lading used by certain railroads differed from one another. There seemed to be a necessity for a new bill of lading that should be uniform. The new bill is alike in all sections and it is the same as the old bill."

At this Commissioner Prouty asked: "If the old bill is like the new, what's the use of putting the new one in force?"

"Well," said Mr. Russell, "it is because of the difference in size. The new bill will not be enforced any more than the old one was. [Laughter.] As to the not-negotiable feature, the roads never intended to enforce that clause."

"There is no reason why there should be any clause in the bill that should not be enforced, is there?" asked Commissioner Prouty. "If there is any clause in the bill that is not enforced, why is it there? Merely as a lawyer and not as a railroad man, when I make a shipment of goods of any description I naturally expect the railroad to accept my goods under a common law liability. Now, what is it that the railroads propose to do after December 31 under the new bill of lading which they are not doing now?"

Mr. Russell protested his ignorance. "That's what we are trying to find out," he said. At which the audience, consisting of shippers from all parts of the country, laughed derisively. Mr. Russell concluded by saying that shippers under the new bill would be treated exactly the same as under the old bills.

Mr. Firth also made a statement preliminary to taking the stand, prefacing his remarks with an indignant repudiation of Mr. Mayer's suggestion that this new uniform bill movement was a "speculative move," and demanded the protection of the Commission against any further such insinuations. He then gave a history of the uniform bill from his point of view. It had come into existence in 1890, and "was formed with the honest purpose of

giving everybody a fair show," he declared. "The roads were then using a great variety of bills of lading. The necessity of a uniform bill providing uniform rates and uniform conditions was apparent. Such a bill was formed out of the bills of lading then in use by the railroads, and suggestions made by shippers and freight agents. Certain sections, like the New York roads, have waived valuable privileges as to limitations of liability, and many sections of old bills have been thrown out in order to make the bill uniform."

"The first trouble we had was when Chicago shippers protested against the bill being marked 'Not negotiable.' We found no trouble anywhere except in Chicago. Whenever we want to find trouble we come here. The proposed new bill proposes no new conditions, no new rules and no new rates. It simply provides for economical insurance of shipments."

When Mr. Firth went on the stand it appeared that the uniform bill was made by the uniform bill of lading committee, of which Mr. Firth is chairman. It is composed of the following railroad men: H. B. Chamberlain, vice-president of the Chicago & Erie Railroad; E. O. Caldwell, vice-president of the Lackawanna Railroad; George F. Randolph, vice-president of the Baltimore & Ohio Railway; E. T. Summers, traffic manager of the New York, New Haven & Hartford Railway; E. R. McCabe, traffic manager of the Pennsylvania lines west of Pittsburg; E. B. Mitchell, S. B. Knight and C. C. McCain. There are no shippers' representatives. The duties of the committee are to "recommend."

Under oath Mr. Firth maintained that there is nothing new in the bill and that no new practice by the roads has been contemplated; that rates will not be increased; that the not-negotiable feature was inserted because it is required under the laws of Pennsylvania, New York and Maryland (which cannot affect interstate business, as he admitted), and the provision will be waived whenever the shipper asks that it shall be waived. As to liability, he said the roads would pay for loss and damage just as they always have paid; but he did insist that the roads are not, and have not been for many years, handling goods upon bills with common law liability; that shippers know and have known this, or at least have had constructive knowledge of this fact, since it has been on the classification book filed with the Commission and with station agents, and by reference thereto on the actual B/L issued it became a part of all bills of lading; that shippers knew they could have had unlimited liability service by asking for it and paying for it at 20 per cent increase of rates; and that this excess rate is a reasonable payment for the insurance of the goods in transit.

It took about five hours of examination to exhaust Mr. Firth's contention on this score. He was an expert witness for his side of the case and one who admitted nothing of moment to his interests.

Mr. Firth's counsel, Mr. Russell, had held to the same theory of the roads' limited liability under the B/Ls now and for years past in use by the public, and that the shipping public wanted no other service because no shipper has ever asked for the unlimited liability service, or paid the 20 per cent increase to get it; but he did admit that apparently the 20 per cent increase might be a too high rate to exact for insurance, although the insurance should be paid for by the shipper who wants it. Mr. Firth, however, held that the 20 per cent rate was a reasonable and fair one, and nowhere was willing to agree with Mr. Russell that it might be made the subject of a conference between the roads and the shippers.

During the second day's session, Mr. Mayer and his colleague, John B. Daish, for the American Shippers' Association and others, examined a large number of witnesses to establish the fact that in spite of Mr. Firth's say-so, the roads have never enforced the limited liability clause which he claimed is now a part of the B/L and has been enforced; that shippers practically never insured

goods in transit by rail; that the 20 per cent increase for insurance is exorbitant, and that the not-negotiable endorsement is a feature destructive to the customs of commerce. As to this last Mr. Mayer introduced in evidence a telegram from President William A. Nash, of the Corn Exchange Bank of New York, in which that financier declared that the new uniform bill of lading, marked not negotiable, would be undesirable collateral and would be so considered by the banks of that city.

During the day, when Geo. C. Warren of Saginaw, representing the Michigan and National Hay Associations and the Michigan Bean Jobbers' Association, was on the stand, the railway attorneys endeavored to make it appear that the endorsement "not negotiable" made no difference in the negotiable character of the B/L. Mr. Bayless of the Vanderbilt lines especially insisting that the B/L would be as good collateral as ever because it would be "assignable," though "not negotiable." "If I assign it and get the money on it, I negotiate it, don't I?" asked Mr. Warren. "No, you assign it," said Mr. Bayless. Mr. Warren, not being an attorney, could not see this beautifully fine distinction, nor could the audience split this hair "twixt west and northwest side." Mr. Patterson of the Pennsylvania lines indicated by his mobile upper lip and facial expression generally that he had it down fine and even suggested to Mr. Warren that any attorney, "even Mr. Mayer," could see a cleavage so abysmal as that. But, as Mr. Warren and others said, if the bankers can't see Mr. Bayless' fine point of difference between assignability and negotiability, and would not advance money on a "not-negotiable" B/L, it doesn't make much difference, under the circumstances, whether there is any difference or not.

All the witnesses were agreed that the use of the endorsement "not negotiable" on the B/L would destroy its value as collateral. Alfred Brandeis of Louisville said the National Bank of Kentucky, perhaps the largest bank south of the Ohio River, had given notice that bills of lading so marked would not be accepted by it as collateral, nor would the new uniform bill be regarded by it as good collateral, even without said endorsement, owing to its limitations of the carriers' liability.

Geo. A. Stibbens thought the new bill might be usable if not marked "not negotiable."

Herbert Bradley told of the effect of the new bill on the milling industry. It would be simply crushing to the business—certainly to that of the small miller.

Mr. Jackson, of Gill & Flisher, Baltimore, testified to the destructive effects of the "not-negotiable" endorsement. It would revolutionize the grain trade and inflict no end of injury upon grain dealers and receivers of moderate capital and limited credit.

C. C. Bovey of Minneapolis gave most valuable testimony. The Washburn-Crosby Company has paid about \$2,500,000 a year in freight, and has collected from claims for losses only a few thousand dollars a year, practically no claims being contested—none on the ground of no liability under the B/L. The 20 per cent advance for insurance he characterized as "positively absurd."

Mr. Bovey had never heard of insuring rail shipments (nor had any other witness); in fact, although he had handled millions of tons of freight, he had never known or supposed, until this agitation came on, that his company was receiving any other than unlimited (common law) liability bills. (Mr. Bentley, of the Illinois Steel Co., handling 5,000,000 tons annually by rail, testified to the same effect.)

Mr. Bovey presented a further and unique but rational view of the new bill's effect, which he called the "moral effect," and which was original with him. He said that as matters now stand railway employees, understanding, as they do, that the carriers are responsible for loss and damage, are reasonably careful in handling goods in transit; but once let it be understood by them that the carriers are not responsible, then, he said, there would unquestionably be a large increase in the

volume of these damages. This would be inevitable.

"Do you intend, after January 1," asked Commissioner Prouty of Mr. Firth, "to force the shipper to sign something which will eliminate the common law liability service?"

"The shipper will sign an order saying he will take the limited liability service," answered the witness; "but if he wants the other with the 20 per cent increase and the railroads taking the liability under the common law liability, he can have it."

"It seems to me," said the Commissioner, "that you have not given the shipper any alternative. Not wishing to insure shipments and accept your common law liability, you have prescribed a prohibitive rate for so doing. In other words," said the Commissioner, "if you hold a pistol to a man's head and at your suggestion he gives you his valuables, he does not do it voluntarily, but because he has no other alternative."

On the third day of the hearing Mr. Mayer further discomfited the railroad representatives by reading letters in which the Ill. Cent. Ry. and the C. & E. I. roads declare they will not use the new bill under any circumstances, although these lines are in official classification territory. The N. Y., N. H. & H. also has made a similar statement to its patrons. It is also understood that the Wabash lines east and the Lake Shore have decided not to put the new bill into effect.

During this session J. W. McCord of Columbus, Ohio, in the course of some telling testimony gave a hard blow to the limited liability theory, under which Mr. Firth said the roads have been acting "for many years," by saying: "That the carriers have regarded themselves as liable under the common law for damages was indicated when they paid losses resulting from the Johnstown and other floods, where they could have set up the defense that it was an act of God."

George H. Holt, representing 40,000 lumbermen, was the last witness. When asked what he thought of the 20 per cent advance in freight rates, he said: "It is insane! Insane! The rates already have been advanced to unreasonable degree. A further increase of 20 per cent would put the lumber dealers out of business."

"The railroads say it is for insurance," said Attorney Mayer.

"Then the 20 per cent insurance is applied the wrong way," continued Holt. "If the carriers are released from common law responsibility, they should reduce the tariff 20 per cent. They place the burden of proving damages upon shippers. It would be impossible to prove a loss without the machinery at command of the railroads. Under this new bill of lading there would be a hazard that never before existed. It would have a bad moral effect. Employees would become careless where they now are cautious in handling freight, the loss or damage of which they would have to pay for." Mr. Holt also surprised those present by the statement that the lumbermen proposed to attack the excessive charges exacted on lumber.

Mr. Holt testified that his corporation took from railroad companies no waybill, but only a receipt for freight showing its destination. So did J. J. Flood, traffic manager for W. M. Hoyt & Co.; A. A. Sprague of Sprague, Warner & Co., and the traffic managers of Heath & Milligan, Reid & Murdoch, and others, indicating, if it indicates anything beyond indifference to this unlimited liability, that the railroads were more lenient toward large than small shippers.

In practice, to all large shippers the roads have issued simply a receipt for the goods, some, indeed, bearing a reference to the liability clause published on the classification book, but many of them with no such reference; and Mr. Williams of Cincinnati, representing the Ohio Shippers' Associations, insisted that the roads should issue simply a "clean bill," or receipt, the rights under which of both shipper, consignee and carrier would be determined by the state laws for state shipments and United States laws for interstate shipments.

At the conclusion of the hearing Commissioner Clements said:

"We will postpone this case until Thursday, December 15, in Washington, conditionally. I would suggest this to the representatives of the railroads: If the railroads want more time to prepare their side of the case, let them postpone the operation of this 20 per cent increase. They can issue their new bill of lading if they so desire, since Mr. Firth states that 50,000,000 have been printed for distribution, but with the form of classification which they are to send to the Interstate Commerce Commission let them enclose a written agreement that the proposed increase is not to go into effect until this Commission has had time to consider the case, and a copy of such agreement given to the Commission could be printed by the roads and pasted in the classifications as distributed."

"I thank the Commissioner for the suggestion," said George S. Patterson, attorney for the Pennsylvania lines, "and I think it will be accepted by the roads."

"Well," said the Commissioner, "confer among yourselves and notify me as soon as possible. If I hear nothing from you the case will be called up again in Washington on Thursday, December 15."

Commissioner Clements added that if the case was not called in Washington on said day it would be postponed until some time in January, provided the roads agreed to postpone the operation of the 20 per cent insurance clause until February or later.

The Commission then adjourned.

Among those present at the hearing as delegates of organized bodies were the following:

James W. Wardrop—Merchants' and Manufacturers' Association of Pittsburgh and the Lumber Dealers' Association of Pittsburgh.

Grant McMorran—Miami Valley and Western Ohio Grain Dealers' Association.

J. M. Allen—Rockford Manufacturers' and Shippers' Association.

H. R. Boomer, Theodore Schwartz and W. N. Eckhardt—Chicago Board of Trade.

Charles Cranston Bovey and Herbert Bradley—Millers' National Association.

George A. Stibbens—Grain Dealers' National Association.

E. J. McVaun—Commercial Club of Omaha and Iowa-Nebraska Wholesale Grocers' Association.

Alfred Brandeis, T. G. Williams and John J. Telford—Board of Trade of Louisville.

W. B. Reed, Charles A. Beno and F. H. Keys—Commercial Club of Council Bluffs.

C. B. Jenkins—Ohio Millers' State Association, Middle Ohio Grain Dealers' Association and Ohio Shippers' Association.

J. W. McCord—Ohio Shippers' Association and Ohio Grain Dealers' Association.

John B. Daish—National Hay Association and the Baltimore Chamber of Commerce.

Henry Othmer—Wholesale Saddlery Association of the United States.

Paul Blatchford—Central Supply Association, National Metal Trades, Eastern Supply Association and Chicago Metal Trades' Association.

C. B. Reilly—Indiana Grain Dealers' Association, Indiana Shippers' Association and Shippers' Protective League of Indiana.

George M. Holt—National Wholesale Lumber Dealers' Association, National Lumber Manufacturers' Association and the Hemlock Association of Wisconsin.

George C. Warren—Michigan Hay Association and National Hay Association.

E. S. Conway and Thomas C. Moore—National Piano Manufacturers' Association.

George S. Bridge—National Hay Association.

H. C. Haskell—Millers' Federation.

A. A. Sprague Jr., G. M. Pond, F. T. Bentley, O. F. Bell, Elliott Durand and J. J. Ryan—Illinois Manufacturers' Association.

Low water in the Wabash River has prevented the moving of a large amount of corn by water this fall.

THE NATIONAL SEED DONATION.

Some fifty years ago, before such an institution as an experiment station was thought of as a governmental function in this country, the patent office, then the home of the agricultural department, began distributing through members of Congress certain seeds for the purpose of having their merits tested by practical farmers—most of whom were probably poor, if practical, farmers. From that beginning, laudable enough in view of the conditions of half a century ago—though it may well be doubted if the information resulting from the distribution warranted the modest expense—has grown the scandalous waste of the present helter-skelter scattering about the country of about \$350,000 worth of seeds of all kinds annually.

Leaving out of the count entirely the placing of new wheats from Russia and the durum in the semi-arid West, as well as of new varieties of rice and cotton in the South and Southwest, which, being new, may in that fact find justification for free distribution to growers, there are to be given away by the present distribution some 50,000,000 packages (an increase of 300 per cent since 1900), mainly vegetable and flower seeds, the giving of which by the government can find no defense. It being simply a free gift to people, all of whom are amply able to buy the seeds for themselves, it has not even the merit of a donation to the poor.

Each member of Congress will be credited with 14,500 packages, among which are bulbs, grape vine cuttings, lawn grass, sorghum and beet seeds, strawberry plants, etc., the city congressmen being given a special allowance of flower seeds for the benefit of constituents residing in metropolitan flats and slum tenements with "roof gardens" and grounds inclosing "castles in Spain," etc. Some 500 people and many machines will pack this sort of plunder, but prior to packing the seeds on the inclosing envelope the representative's or senator's addressed frank had been pasted upon it. Various efforts have been made to perfect a machine for pasting on these franks, with only partial success. The most rapid method is by hand work. Some girls become so expert that they can paste on from ten thousand to fourteen thousand of these franks a day. Each lot of franks received from a member of Congress or senator is run through as a special order and cannot be mixed with any other lot. The franks are all addressed by the members of Congress or their clerks and are sent down in various quantities, sometimes a thousand, sometimes two thousand, sometimes only fifty or a hundred. An accurate account is kept with each member, and each time an order is received it is debited and credited the same as is done in a bank, the franks taking the place of checks on deposit.

So anxious are the people to get for nothing these seeds that a few pennies would buy at the grocer's, that the demand last winter exceeded the supply, and Congress increased the appropriation from \$270,000 to \$290,000 for this year's distribution. Congressmen had their mails burdened with requests for garden seeds, and they importuned the secretary of agriculture for these small packages as much as they have the President for patronage.

This distribution has always been opposed on both moral and business grounds. J. Sterling Morton, former secretary of agriculture, made a determined effort to shut off the distribution, and having then a discretion in the matter did cut it off for one year, but he found that, in spite of all his endeavors, the appropriation was the next year increased and distribution made mandatory.

Secretary Wilson does not intend to antagonize Congress by a campaign against the free-seed distribution. But he would also like to avoid the hostility of the seedmen of the country, which the practice invites, because it seriously interfered with their business, and so in his last report to Congress he recommended that the indiscriminate distribution of free seeds and common plants be discontinued and that in the future only those seeds be given away which produce new plants, or plants

which economic conditions demand to build up new industries. This suggestion, however, like many other sound ones made to Congress, was sat on by that body, who resented such interference with a petty graft, and it has been abandoned because of the determination of Congress to continue the distribution, as one of the means of carrying on the biennial election canvass. Secretary Wilson should be given credit to make it as decent and useful as possible, but not much can be said of the practical results of his desires.

KENDALL SMITH COMPANY.

The buildings shown in the accompanying engraving represent much more than a mill and elevator, being the headquarters of a large and varied business, of which the milling department is an important factor only. The business with its buildings is located at Woodlawn, a suburb of Lincoln, Neb., and consists of a mill of 200 barrels' capacity, with feed mill of 55 tons' capacity and an elevator with room for 34,000 of small grain and cribs for 20,000 bushels of ear corn. The power equipment is an 80-horsepower engine and 35-horsepower water wheel.

Then there are feeding sheds for 2,000 head



PREMISES OF THE KENDALL SMITH CO.

of cattle, forming a part of the equipment of a farm of 865 acres of land.

And just to the right of the boiler house of the mill is seen part of the front of a general store building, being another factor in a community of minor buildings which include six dwelling houses, a blacksmith shop, barns, sheds, etc.

GOOD SEED PROPAGANDA.

The results of the good seed car-end lectures made by Prof. P. G. Holden in Iowa, last winter, have been so manifest in this year's corn crop that the railways of Iowa have tendered their services in aid of a repetition of that work during the coming winter, and Professor Holden has agreed to repeat the lectures in all parts of the state. The railways will provide special trains for Professor Holden and party, to be run over the different lines, stopping at every station, thus giving opportunity for Professor Holden to be heard by all the farmers in Iowa. He will emphasize the importance of putting the proper number of kernels in every hill of corn in Iowa and of knowing that every kernel will not only grow, but will produce a vigorous stock and a good ear of corn.

There has been a great demand coming from all parts of the state that the work begun last spring be continued and the railroad companies and the Iowa state agricultural college have co-operated.

The following railroads will co-operate in this work: Chicago & North-Western; Chicago, Rock Island & Pacific; Chicago, Milwaukee & St. Paul; Chicago, Burlington & Quincy, and Illinois Central. Secretary Wells will have charge of the advertising,

the members of the Iowa Grain Dealers' Association assisting him as they did last winter.

The C. & N.-W. road will also run "pure seed specials" into the wheat country of the Northwest, carrying Professors Wilson and Wheeler, of the South Dakota Agricultural school, A. C. Johnson and M. F. Greeley over its various lines, with stops at every village and way station. These wheat experts will conduct brief lectures on the importance of sowing only pure seed wheat.

The Des Moines Cereal Club also is making arrangements to hold a corn carnival in that city during the winter. Geo. A. Wells proposed the affair, and on November 16, at a board meeting of the Commercial Exchange, the following committee was appointed to confer with the other associations: H. H. Lantz, H. H. Polk, George J. Delmege, Dr. Van Werden and Frank Corrisson.

RAILROADING AS IT IS IN TEXAS.

On November 18 one of the railroad commissioners of Texas made a motion before that body that the Commission instruct the attorney-general of Texas to enter suit to forfeit the charter of the C., R. I. & G. R. R., the Texas branch of the Rock Island System, the motion being based on a complaint by Frank Kell, a miller at Wichita Falls, who alleges that the said railroad company has grossly violated the rules of the Commission on the handling of wheat from Oklahoma; that it has practically taken from the Wichita Falls millers all the business in the Panhandle and turned it over to the millers doing business on the Rock Island in Oklahoma.

The motion was not acted upon, there being some absentees of the Commission, and the road's attorney will be given a chance to be heard. As, however, the railroad law of Texas is more or less sui generis and quite radical, the case has been more than a passing interest. Commissioner O. B. Colquitt, who was absent when the motion above mentioned was made and pending his presence at a regular meeting of the commissioners the motion was tabled, subsequently said that, "In his judgment any railroad which voluntarily reduced its rates should be commended instead of being punished. The low rates which the Rock Island had in effect made it clear to his mind that they are amply satisfactory from a revenue-producing basis to that road."

Mr. Colquitt thinks, therefore, that these reduced rates that be made the basis for rates on its Texas lines. "If such action is taken by the Commission it will create a competition which the Fort Worth & Denver and the other roads will have to meet by applying to the Commission for authority to put in reduced rates on the commodities affected," says an Austin correspondent. "Thus the securing of a general reduction in rates would be obtained in the end in a perfectly legal manner. It is known that it is Mr. Colquitt's view that a general reduction of the rates on cotton can be obtained without directly applying the first reduction to all of the roads. He takes the interesting position that under the law the Commission would have full authority to reduce the rates on a road whose earnings show it to be in condition to stand for it. That would create a competition which would have to be met by the other roads of the state and a general reduction of the rates would come as a natural consequence.

"The Commission has power under the laws to create competition between the railroads. As an instance of this, the business men of Ballinger, on the Lampasas branch of the Gulf, Colorado & Santa Fe, made application to the Commission recently to be placed in common point territory. The application was granted and the Santa Fe extended its common point territory to include the place. The business men of San Angelo, eighty miles further west, found that under this advantage of a reduction in rates Ballinger was encroaching upon their natural territory. The Santa Fe was also losing on its tonnage to San Angelo. In order to remedy the situation the Santa Fe voluntarily extended its common

point territory so as to include San Angelo. As a direct result of this extension of the territory on the Santa Fe, the business men of Big Springs on the Texas & Pacific north of San Angelo found that the latter place was getting trade away from them. When the situation became known to the Texas & Pacific that road voluntarily extended its common point territory from Abilene west to include Big Springs, a distance of about 100 miles. This competition, which greatly benefited the merchants and general public in the territory named, was brought about by an act of the Commission. These are only a few of the many ways in which competition may be created by the Commission between the roads of the state."

LAKE NAVIGATION CLOSED.

The navigation season of 1904 closed on the Great Lakes on December 5 at noon, when marine insurance expired, and very few boats have since been loaded or will be.

In the grain trade the season at Chicago has been one of the poorest for years, the shipments having been only—

1904	40,115,501 bushels.
1903	102,699,934 "
1902	61,759,753 "
1901	80,514,731 "

And of flour only—

1904	667,679 barrels.
1903	1,089,621 "

The season was delayed at the opening by strikes and the largest carriers did not go into service until the middle of June, and it is estimated that not less than 25,000,000 or 30,000,000 bushels of grain, which otherwise would have been shipped by lake, were sent East by rail. The coal movement was about 250,000 tons short of 1903 and the loss in that traffic may be attributed largely to the strike.

CANADIAN INSPECTION.

Wm. P. Wood, grain merchant at Hull and London, and also president of the London Corn Exchange Association, recently visited Winnipeg on business and pleasure, his business being in connection with the handling and grading of Manitoba wheat, etc. He expressed himself as satisfied with Canada's present inspection law. "The cases we have had in which complaint has been made have been very few in proportion to the amount of Manitoba wheat imported; surprisingly few," he said. "They are scarcely worth mentioning and all of them have been capable of adjustment. All have been cases where there was strong suspicion of grain having been changed in transit."

Mr. Wood further said to a Winnipeg reporter that the grain received in consignments "is, with scarcely an exception, found to be quite equal to the official samples which are sent over regularly from Winnipeg. Of course," said Mr. Wood, "we do not as a rule refer to the samples. We buy on an inspection of the consignment. If any irregularity should occur we could consult the official samples we receive, but in the vast majority of cases this is not necessary. That we have no necessity for making comparison with the samples is due to the excellent grading done at Winnipeg. On the other hand, of grain shipped from Galveston and New Orleans there is a great deal of serious complaint. There has been practically no redress for our members in these cases. When this sort of thing becomes serious, the consequence simply is that we do not buy from that quarter. Therefore it is of the highest importance that the high standard which has been so far maintained by Manitoba shippers be continued."

Mr. Wood can hardly be speaking of this year's Manitoba crop, none of which had arrived abroad at the date of his departure; and his references to the past are an old story, whatever importance may be attached to his views.

This year's Manitoba wheat is another proposition, quite, and buyers anticipate that on account of rust there will be more or less difficulty in

grading the grain to the satisfaction of growers at home and consumers abroad. The elevator companies in September, in order that they might not be losers in this respect, decided that before buying any wheat in any one district (that is, before declaring the grade of the first of this year's wheat delivered to them), they would ship a certain number of cars from each district affected to Winnipeg to be inspected by the grain inspector there, who should pronounce the grade. This report the buyer had as his basis on which to work, buying the same as in other years. This measure was taken by the elevator companies purely as a preventive of loss to themselves, as this is an exceptionally difficult year to buy wheat in, and they might have heavy losses in the case of any their buyers grading early shipments too high. The farmers will not be losers by this, as it simply means that the standard for country buyers will be, if anything, more rigidly in accordance with the inspection act than before. The farmer who delivers wheat is paid 60 per cent of the price,

"Texas corn is peculiarly adapted to the export trade on account of its dryness, and it reaches the other side of the Atlantic in splendid condition. Of course, the farmer must select the proper land for corn, as he does for any other crop, but that there is a great quantity of corn land and there is no question."

SHEARER & RICKARDS.

Away up in the extreme grip end of the Ford County panhandle is Kempton, a village of only a few hundred inhabitants, whose rail connection with all the world is the Illinois Central road. Agriculturally speaking there is no richer country in the Mississippi Valley. In the geological past Ford County panhandle, with Livingston on the one side and Iroquois on the other, was undoubtedly a great drainage basin in which the rich silt of innumerable acres found lodgment, making a soil that in fertility has no superior in the great American Corn Belt. Corn and oats never



ELEVATOR AND OFFICE BUILDINGS OF SHEARER & RICKARDS, KEMPTON, ILL.

according to the local buyer's estimate of the grade, and when the Winnipeg inspection is passed the remainder of the full cash value is paid.

TEXAS CORN.

Certain prominent Eastern exporters of corn, says a Galveston correspondent of the St. Louis Post-Dispatch, after having received samples of the new crop from Texas, were inclined to believe that the Texans were trying to spring samples of old corn or kiln-dried corn when orders were given. So thoroughly were the Easterners impressed with this idea of a "skin game" that they were inclined to doubt the word of prominent Galvestonians and were not convinced that the samples were of the new crop and that there were nearly 200,000,000 bushels of the same grade in Texas until numerous letters and telegrams had been written and received.

In discussing the Texas corn crop, Mr. C. McD. Robinson, chief grain inspector at this port, said:

"These letters from Eastern exporters are very flattering, and as we have the goods to deliver, I believe that if those gentlemen are not already satisfied that the samples sent them correctly represent our Texas crop, they will be satisfied after shipping begins. The Texas farmers certainly have a lot of good corn, and with the shortage of feed-stuffs on the other side, they cannot fail to get a good price for every bushel they have to sell.

"This year the corn crop has yielded on an average of forty to sixty bushels per acre, and it is such good corn that they are receiving from 45 cents to 50 cents per bushel at their home stations.

wholly fail there, and everywhere in that country we find rich farmers and big grain elevators, since even the great "I. C." is not always able to move the grain as rapidly as it flows to market.

The Kempton Elevator, shown in the picture, which is a typical grain house of the country, is owned by Shearer & Rickards. It is 80x40 feet on the ground and 40 feet high, giving storage room for 80,000 bushels. It has four dumps, two elevator legs with 11-inch cups, two 40-foot loading spouts and an eight-horsepower gasoline engine—all the machinery needed for handling a trade that in the hauling season is always in a hurry and expects the elevator man to "get busy" and stay busy while he's at it. And he does.

MANITOBA WHEAT ARRIVES.

The first cargo of Manitoba wheat to reach Chicago finished unloading on November 26. It consisted of 82,000 bushels sample Manitoba wheat, and was unloaded at one of the Peavey houses at South Chicago. The wheat is for milling purposes, and was brought down by Rosenbaum Bros. The duty paid was over \$20,000.

At Minneapolis the first consignment of duty-paid wheat for the Pillsbury-Washburn Flour Mills Co. arrived on November 25, from Emerson, Man. The shipment was the first of a 200,000-bushel lot, which the Pillsbury mills began grinding three days later on the drawback basis, and the company hopes thus to get back 90 per cent of the duty. The feed will be disposed of in local markets.

OAT SMUT.

It is a little early to talk remedies for oat smut, but it may be interesting to know that Bulletin No. 111 of the Wisconsin Experiment Station puts the loss during the last three years from that cause in that state at \$13,500,000. During this period the rural public schools have cost the taxpayers of the state \$11,500,000. This is an immense waste, considering that it is, a large part, an unnecessary loss that might be avoided had the farmers understood the cause of smut and the means for its prevention.

The preventive measure in common use by advanced farmers is heating the seed oats with a 40 per cent solution of formaldehyde, which can be purchased from or obtained through any good druggist at about 50 cents per pound. One pound of this 40 per cent solution stirred into 45 gallons of water makes a solution of about proper strength for treating seed oats, and a sufficient quantity for treating 15 bushels. Upon a well swept floor spread a layer of 2 or 3 inches deep of the oats to be treated, and with a water sprinkler thoroughly wet down with the solution. Place upon this wet layer another layer of the oats and wet down as before, and so continue until all the oats are wet, or until the pile is as large as it is desired to handle. Then thoroughly shovel over and into a well rounded pile and allow to stand for two hours, and spread out in as thin layer as possible and shovel over from time to time until dry, hastening the drying as rapidly as possible. Warm, clear weather is desirable for this work.

Wheat smut, which has done so much to reduce the grade of spring wheat of the Northwest during the last two seasons, might be avoided in the same way, were farmers as anxious to find the defects of their grain as they are to "cuss" elevator men for pointing them out. The latter have, during the winter just ended, urged upon grain growers the necessity of planting only clean and smut-proof seed, and it is likely their advice will be taken by many reasonable wheat farmers.

MORE BLOOD TAKEN.

The season continues to be very severe on the bucket-shops. The Federal Stock and Grain Exchange, which "gave down" at Boston on November 11, had its victims all over New England, where a year ago its 60 branches coined money like a gold mine, cleaning up \$2,000,000 in a single year. It was "caught in the rise." There is talk of reorganization, of course; lambs are always plenty, and trust an operator of this kind to take care to keep enough out of the wreck to "reorganize."

At Pittsburg, on December 4, Richmond & Co. became "financially embarrassed"—only financially, however, it is believed. This corporation had a branch at Buffalo and in scores of small towns in New York, Pennsylvania, Ohio, the Virginias, Maryland and Canada.

On December 6 the National Commission Co. of Indianapolis also complained of cold feet. "Owing to certain contingencies we shall depend upon your indulgence." This corporation also had branches galore in Indiana. It will be pleased to reorganize.

Meantime that interesting aggregation at Kansas City, the Christie Grain and Stock Company, has leased its city business to A. D. Williams of Toronto, Can. Hereafter the house will be known as the Williams Grain and Stock Company. E. F. Parks will be the manager. "Our immense country trade in grain and stocks will continue in the Gibraltar buildings," said Mr. Christie. "We have a large number of country branches, and our outside business requires exclusive attention."

Becoming more and more ashamed of numerous failures among its members, the New York Consolidated Exchange has determined to exercise a close supervision over the books of its members hereafter, in order to prevent, if possible, their trading on the money of their clients. There have been four or five failures recently on a bull market. Or-

dinarly only bucket-shops fail on such a movement. Strictly commission houses have no business to fail under such conditions. As the public is usually long of stocks, they make money when prices go up, and the broker should be benefited instead of injured by the profits of his customers.

ALFALFA MEAL.

Prof. H. M. Cottrell, formerly of the Kansas Agricultural College, now agent for an establishment in Omaha manufacturing alfalfa meal, describes the product he sells as consisting of 75 per cent alfalfa meal and 25 per cent sugar beet molasses. The alfalfa used for this product is none but first quality, which shows from 16 to 18 per cent protein. This is mixed with pure sugar beet molasses, which contains 50 per cent sugar, which is digested at once by the animal. The product of this happy combination is called "alfalmo," which contains 15 to 17 per cent protein and 50 per cent carbohydrates and fat. The product, then, contains, first, alfalfa, called the best muscle, milk, bone, egg and flesh producer known; second, molasses, a most palatable fat-forming food, the combination forming a product which pleases the palates of horses, dairy and beef cattle, sheep, hogs and chickens. It is put up in 100-pound sacks and retailed at \$22 per ton, or \$1.50 per hundredweight.

In order to make the alfalfa meal the hay must first be kiln-dried to remove the moisture from the stems, and no hay is ground but first quality that has been made green enough to retain its leaves.

FEEDING GREAT BRITAIN.

The Baltic fleet episode in North Sea, which filled the world with alarm at the prospect of a vast European war, has revived, or, rather, renewed, interest in that perennial question, England's food supplies in time of war—a problem that has called out the following observations by the Winnipeg Free Press:

For weeks Russia has been shipping from five to five and a half million bushels of wheat, and the larger portion of this wheat has gone into Great Britain. In case of war with Russia these shipments would immediately cease. Shipments from the Danube have been heavy, but these also would be speedily cut off, and Russia would naturally move heaven and earth to prevent Great Britain receiving supplies from the Argentine. American shipments to Great Britain are this season much lower than for many years. India has been shipping at the rate of a million and a half a week and even two millions. Australian shipments have been somewhat disappointing and reliable information is to hand that the report of 20,000,000 for export was considerably in excess of what the colony has to spare, and already 10,000,000 have been exported; so there is not much more available from that source. In case of war, Great Britain would have to look to Canada, India, Australia and America for her wheat supplies, and the surplus from all these countries would be barely enough to meet the requirements of that market.

Of course during the present crop year, in case of war with Russia, Great Britain would be compelled to buy wheat of Canada or flour of Canada and United States, no matter what the price, although up to this time Russia and Argentine have supplied the bulk of her demands, owing to their lower offers. Assuming, however, that the North Sea episode may bring England's attention to the many schemes advocated by certain of her publicists for preparing for such an emergency of war as was threatened, the Free Press makes the following exhibit of "what a good thing" the proposed system of insular storage at public expense would be for Canadian shippers:

These are remote possibilities, but they are possibilities nevertheless, and add great force to the arguments adduced by Mr. Marshall Stevens, the Duke of Sutherland, Lord Strathcona and others, to the committee on food supplies in war time, for the establishment or storage in Great Britain for Canadian or Colonial wheat generally, in which the wheat could be held free of rental charges until such time as it is sold, the idea being for the government to pay the rent of these storage elevators in order to insure large supplies of wheat

being in the country in case of war. The advantage of this storage to Canadian shippers would be that their wheat would go into store without additional charge, in close proximity to great centers of population, and they would be able to take advantage of cheap ocean rates in shipping. Had this storage been available this year a large quantity of Canadian wheat would have been shipped direct and would be on hand for any rise in the market. When Mr. Marshall Stevens discussed this matter before members of the Grain Exchange at Winnipeg in September, the scheme, with some modifications as to handling facilities, was deemed feasible by some of the most prominent members of the Exchange. The advantage to Great Britain of such a scheme is obvious. Another fact emphasized by this war scare is that at present Great Britain purchases 43½ per cent of all world's shipments of wheat, and Canada last year exported to Great Britain just a shade over one-tenth of her supply and Argentine about one-quarter. The estimated requirements for Great Britain this year are 1,100,000 quarters, or 8,800,000 bushels, weekly, showing the enormous possibilities of expansion of trade in wheat with the mother country. If the entire crop of the Canadian West—taking the Free Press estimate of 55,000,000 bushels—were available for export, it would only suffice Great Britain for five, or, possibly, six weeks.

FACTS AND FIGURES

During the past month have sailed light from San Francisco owing to the demoralized condition of the freight rate on grain cargoes.

The first carload of wheat ever shipped from Bemidji was loaded and shipped to Duluth by the Bemidji Elevator Company on November 14.

"I have enjoyed reading the 'American Elevator and Grain Trade' very much and receive many ideas from it, and I think the grain trade should be continuous subscribers, as you are certainly putting out a paper they should all have."—A. C. Savage, Adair, Iowa.

A. H. Jackman, grain inspector of Oklahoma, in his annual report to the governor, says that 1,103 carloads of wheat were shipped the past year up until the first of December, and that a majority of this grain was sent South. There are three deputies, at Enid, El Reno and Oklahoma City.

George Taylor and Charles E. Rogers have purchased the business of the Hawkeye Seed Co. at Des Moines, Iowa, and will continue it under the style of the Capitol Seed Co. The store will be moved to another location and enlarged. Mr. Taylor was an employee of the Hawkeye Seed Co.

In view of the approaching change of the Minnesota state administration and probable change in the personnel of the State Board of Grain Appeals, the Duluth Board held a meeting on November 11 at which E. H. Pugh of the Appeals Board was unanimously recommended for reappointment.

"Lest we forget," important as the grain trade is, it is well to note that "there are others." At Pittsburg the railway lines are moving 15,000 cars daily of coal, coke, steel and iron products and other merchandise. This is about five times larger than the grain arrivals at all the primary grain markets. Some of the railway lines out of New York are already blocked with too much business and congested conditions are feared by many of the Western roads in grain territory.—Pope & Eckhardt Co., Chicago, December 1.

May wheat continues to react quickly from the breaks under \$1.10; certainly from sufficient evidence the situation warrants at least that price. We will probably continue to have these temporary breaks and subsequent rallies, and I believe advantage should be taken of the dips to buy. The Argentine crop news will soon cease to be a factor and then our market will again revert to the conditions that have held the price around this level for about four months, and I believe will cause considerably higher prices before another crop is available.—Edward G. Heeman, December 12.



PUBLISHED ON THE FIFTEENTH OF EACH MONTH BY

MITCHELL BROS. COMPANY

(INCORPORATED.)

OFFICE:

Manhattan Building, 315 Dearborn Street,
CHICAGO, ILL.

HARLEY B. MITCHELL..... Editor
A. J. MITCHELL..... Business Manager

Subscription Price, - - - \$1.00 per Year
English and Foreign Subscription, - 1.60 " "

ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., DECEMBER 15, 1904.

Official Paper of the Illinois Grain Dealers' Association.

CO-OPERATIVES AND REGULARS.

The "American Elevator and Grain Trade" has again had its solicitude for the regular grain trade questioned by a regular dealer, who complains that he sees in the news columns from time to time the statement that the farmers of So-and-so have organized or are about to organize a co-operative company. This is true; and so long as such companies continue to appear, it is the purpose to here chronicle the fact. Occasionally, perhaps, the information may be erroneous or premature, but not often; and in that case no damage is done, anyway.

But the captious must recollect that publication of a fact is altogether different from causing the fact. This paper builds no elevators, individual or co-operative. It discourages the latter for obvious reasons. But in discussing causes, it may be said, once for all, that those who are afflicted with the worst forms of co-operative competition must look to themselves for its origin. They must ask themselves, Have I myself had part or lot in this matter? Could I have prevented it by a different course or by a more liberal, more friendly, more neighborly spirit in dealing with these men? This paper does not pretend to say that the trade are themselves wholly responsible for this kind of competition, but it does say that there are many first-class, experienced men in the trade who do make just that assertion and in a measure substantiate it by pointing to their own freedom from it as due to their own course of procedure when threatened by it.

It is worse than folly for men who are "up against it" to try to deceive themselves. No deception is so childish or so fatal as willful self-deception. To swear at the state and na-

tional secretaries because men are not lifted out of the pit they themselves have dug is as puerile as kicking the cat because one has burned his fingers; the most a man can expect of the associations under the circumstances is suggestive help only. It's the personal equation only that counts for relief here; and if a man can't deal honestly with himself by boldly facing the situation and confessing his own part in it squarely, if he is particeps criminis, no outside influences can save him.

MUTUAL FIRE INSURANCE.

No apology is needed for the printing of the opinions upon mutual fire insurance by elevator owners, found in the department of "Communicated." In selecting the persons of whom opinions were asked, there was no purpose to "pack the jury," if, indeed, it had been possible to know in advance who were or were not friends of the mutual system.

Yet, of the many replies received, and all received have been published, there is only one person who is positively opposed to the mutual companies—an opinion founded on experience of the writer in the East. We should be glad to have had more details of this case—this experience; for mutual insurance in the East, if New England is meant, has been eminently successful among cotton and woolen mill owners, while the flour mill mutuals of the Middle West have gone about their business for at least a quarter of a century without putting a single stain on their escutcheons. It is one of the traditional matters of pride among all the earlier advocates of mutual flour mill insurance that in practice the companies have justified every prediction of their potential usefulness, and elevator insurance by the same companies, and by the Grain Dealers' National Mutual Company, is a natural evolution which will undoubtedly be as beneficial to elevator operators of the future as this form of insurance has been to mill owners past and present, both in the physical improvement of plants and in the lowering of actual rates paid.

THE IOWA SITUATION.

Certain members of the Chicago Board of Trade, posing as farmers' friends, and seeking as their reward the liberal commissions of the farmers, are still harping on Iowa and the "trust of the grain trade in Iowa." The animus of this continual "harping on my daughter" is provocative of "that tired feeling" which usually comes in the spring only. Isn't it about time now to get back to sanity—to stop harping on all "breaks," now that commission men have taken full advantage of an opportune one in order to "cut loose" to their hearts' desire?

The Iowa association is not a trust—has no idea of becoming a trust. Chicago men understand that well enough. But its president, in deference to a little smoke starting on the Chicago Board that sailed over into Iowa,—denies that his association has ever issued a price card or sanctioned the making of a card of prices for all members or that the association is opposed to the co-operative business as such. But it is opposed to the co-operative elevators that are run on the plan of paying expenses by an assessment on

the members while the grain is sold without profit, and thus giving an erroneous idea of grain prices. The association also opposes the contracts of many of the elevator companies under which a member may sell to a buyer outside of the association but must return a profit to the co-operative company on all such sales, thus making the company and not the man the beneficiary of the higher prices paid by outsiders. He says that there are co-operative elevator companies that are members of the state grain dealers' association and working in harmony with the other grain dealers.

This is true in letter and substantially so in spirit also; the repeated statement, credited by Chicago market reporters to Chicago commission men, that Iowa dealers are not now paying Iowa farmers what their stuff is worth, is gratuitous and as unfair as it is unwise—quite as unfair as to charge Chicago grain bidders with not offering what corn is worth because New Orleans has been known recently to bid 2 to 3 cents above Chicago bids for that cereal.

THE PRESIDENT'S MESSAGE.

The President has done shippers an immense service by his reference in the Message to the transportation problem and the recommendation that the Commerce Commission be given increased power to regulate rates. For he has forced this great issue upon the country and Congress. It can no longer be dodged. That his recommendations have stirred the transportation pool to its uttermost depths was to have been expected; the carriers are all unused to such official directness of utterance.

And yet the carriers should not have been surprised. They have long known that the public has been growing more and more restive because of both railroad greed and railroad unfairness as between shippers. The fifth vice-president of the Pennsylvania lines may have expected the Philadelphia Commercial Exchange to take literally his words that, "There is no rebate or private concession of any kind on any of our lines," but this fact, if strictly true, is without a parallel elsewhere. Mr. Firth may protest that the carriers did not propose, by uttering the uniform bill of lading, to raise rates or do any other thing different from what they have been doing for years past, but in the light of experience it is much easier for shippers to believe rather the statement of E. Zimmermann, president of the Cincinnati, Hamilton & Dayton road, who wrote: "The recently published rates have been established with the expectation that the railroads could avail themselves of certain privileges or concessions which would relieve them of liability which might be incurred under the common law," showing that Mr. Firth is too disingenuous to be taken seriously on some matters.

But Mr. Firth is a representative man. He undoubtedly voices the opinions and thought of Eastern railway men, who are proverbially provincial. And this provincialism is a menace to railway stability, as it is to Western shipping interests and Western industries. Said the Chicago Inter Ocean, of December 5:

"If the Eastern lines keep on fighting for what shippers regard as an attempt to relieve carriers of their liabilities under the common law and to increase freight rates 20 per cent, we will see in Congress more hostile legislation toward railways than

was even dreamed of by the Kansas Populists," declared a leading Western railway manager.

The President's message is not the forerunner of legislative radicalism. Rather, it is an expression of the views of the conservative men of the West, who want to prevent just such hostility to the carriers. It voices the demands for control advocated by the Interstate Commerce Law Convention, which was nothing if not conservative—demanding nothing but what is right: reasonable rates and absolute impartiality of service—a fair show for all, no favorite shippers, big or little, in any line.

This is not an unreasonable demand. The difficulties of adjusting the rates in respect to all communities are recognized and conceded. Even the opinion need not be wholly ignored of Mr. Hiland, in charge of the traffic of the St. Paul lines, that—

[The doctrine of Commerce Commission control of rates] would change the railway geography and destroy much of the wealth created by the energy and business activity of individuals, firms and communities, and does not take into account the competition of communities. It is not possible for any five men to preside in Washington over rates and regulate them in an equitable manner with the lack of experience and knowledge that such a commission would have of the commercial as well as the physical conditions existing in various parts of the country. If a national commission is granted this power, it undoubtedly will result in all of the states granting similar power to their commissions so that there would result an eternal conflict in the fixing and adjusting of rates.

That may or may not prove true in practice. It is certain, however, that control by a national commission could not prove more inequitable in the very particulars Mr. Hiland urges that in practice has been the control of rates by the "magnates" who now manage the roads. Rates have been "controlled" by a small coterie of individuals and we see the results.

The President urges a change of method, and it is apparent the public is with him, body and soul.

UNIFORM GRADING.

Now that Congress is again in session and the North Dakota senators have returned to the capital loaded with local endorsements by farmers and farmers' organizations of the McCumber bill for a national grain inspection law, it is gratifying to note that the chief grain inspectors' movement looking to a uniform system of inspection of contract grain has not been abandoned.

On the contrary, the Boston Chamber of Commerce, on November 18, adopted a resolution agreeing to the use by that exchange of the rules for uniform grading of grain recommended by the convention of grain inspectors held at New York on January 6, 1904, with the exception of rules for grading corn; this system to go into effect on July 1, 1905, provided Philadelphia and Baltimore consent to the same system.

This agreement has reference more especially to export grain, and as Philadelphia has substantially agreed to it, it is now up to Baltimore to assent, and so put into active operation, at least tentatively, an experiment at uniform grading, which may be the entering wedge of a system that one day will be universal, either

through the voluntary consent of the grain exchanges or the assent forced by legal enactment.

AGAIN THE SHORTAGE.

At the risk of tediousness, there are reprinted elsewhere official circulars on the shortage question by Weighmaster Foss and the Peoria Board of Trade weight committee. These documents contain nothing strikingly new. That would be difficult. They only emphasize a fact long since established by abundant testimony, expert as well as casual, that the larger part of the serious shortages is due to the negligence or ignorance of the shipper himself.

Both documents again show, as have many similar utterances on this subject, how the shipper, by taking thought, can prevent probably 95 per cent of his losses by leakage. Reform is up to the shipper himself. The experts can only tell him what to do and how to do it—they have told him, and will keep on telling him, doubtless; but only the shipper himself can look after his end of the game and play it as it should be played to win out.

THE UNIFORM BILL OF LADING.

The report of the hearing by the Commerce Commission of objections to the uniform bill of lading does not purport to be the whole or any considerable part of the testimony taken on that occasion, but only a brief synopsis thereof, in a measure indicative of its general character. This synopsis, however, was sufficient to establish the following facts:

That there was no apparent reason for the proposed 20 per cent advance except to increase railroad revenues by an arbitrary but undisguised raise of rates, which no individual shipper can stand when his big competitor does not pay the advance.

That claims have been paid for loss and damage and the assumption was that the carriers have always recognized their common law liability service at the current rates.

That the proposed advance is regarded as a grossly exorbitant charge for insurance.

That the carriers never have pleaded exemption from common law liability.

That the claims for loss and damage from all sources have amounted to less than 1 per cent of the amount of freight business.

That the new bill of lading will hinder and hamper commerce; create unjust discrimination between large and small dealers; create unjust insurance rates; furnish a loophole for the carrier to pay an indirect and secret rebate to favored shippers; will encourage employees to handle goods without care; create prejudice and work to the disadvantage of shippers in the North and East; drive out of business all shippers of moderate capital, because it will increase his rates and prevent the negotiation of his bills of lading.

Even the railroad attorneys present were able to see the force of the objections urged by the shippers, and in order to gain time to make a defense they originally did not consider worth making, consented to a short truce. Even Mr. Firth, too, conceded that the endorsement of the bill, "not negotiable," was an unnecessary and unwarranted attack upon established customs of trade and commerce, the arbitrary abolition of which would be disastrous to the business of shippers of grain, hay, flour and many perishable commodities except that of men of

large capital and unlimited credit, and he assured the Commission that that feature of the bill would be waived except on bills originating in the states of New York, Pennsylvania and Maryland, where local laws make the endorsement necessary on state business.

But the main question now is the future attitude of the "official classification" roads toward the bill, in spite of this showing of its indefensible character. It was clearly understood at Chicago, when the Commission adjourned for a week in order to give the railroads a chance to be heard, that the latter would not attempt to put the bill into force and effect, except on terms proposed by Mr. Commissioner Clements. Mr. Firth, however, on returning to Philadelphia before the adjournment, said that, "The reports from Chicago that the bill would not be put in effect as planned are untrue;" but he would say no more. It is possible, though not probable, that the carriers may accept the position of Mr. Shaw, of the Michigan Central Railway, that the courts, having endorsed the principle that the carriers have the legal right to contract with shippers for limited and unlimited liability service and make a difference in rates accordingly, have the right to take the bull by the horns and do as Mr. Firth repeatedly in his testimony led shippers to infer the carriers would do—put the uniform bill into effect with all its conditions (barring the not-negotiable feature), with or without the assent or objection of the Commerce Commission.

DRYING CORN.

Paradoxical as it may sound, the splendid condition of corn this fall has been a bonanza proposition for the driers. New corn is unusually dry, but only a very small number of the cars are dry enough to suit Chicago inspectors for the high grades, wherefore the opportunity of the terminal drier. For with no-grade corn containing only 15 per cent of moisture, the loss in making No. 2 from it and the large quantities of No. 3 and No. 4 arriving is so very slight that the drying pays good profits—so good that even the No. 3 is often neglected at Chicago for the lower grades.

We repeat, therefore, what has often been said here, that a good drier, not necessarily a large drier, has become as much a necessary part of a first-class country elevator for corn as a cleaner, and will pay as good profits. The profits of the country house are not so magnificent that any means of "turning an honest penny" should be neglected.

PEORIA AS A CORN BUYER.

Peoria is congratulating herself on her fall business in new corn, standing next after Chicago in the matter of receipts. Peoria's initial strength is her immense consumptive capacity for corn of any and all grades, even down to stuff unmarketable elsewhere; but she is further so situated that she is able to distribute by rail in every direction and to compete with all interior markets for grain. Peoria has a future as the core of the corn belt that will keep all markets "guessing."

EDITORIAL MENTION

The Western and Southern roads will have none of the uniform bill of lading. Give them a vote of thanks.

It begins to look as though by the first of the year a new bill of lading will be in vogue which will be fair to shipper and railroad alike.

"Sales of about 15,000,000 bushels of corn have been made to arrive here in December and January," said J. J. Stream. Let us pray—for good weather.

A squeeze is supposed to be on in December corn at Chicago; and the inspection is "just the same as it was a year ago"—it couldn't be more severe than that.

Jones "has no hesitation in saying that the government estimate of the corn crop was very much too high." But is Jones any more reliable than the government?

The Indiana Grain Dealers' Association's annual meeting will be held in January, probably some time during the third week of the month. Secretary Riley will announce the exact date later.

The Kansas Grain Dealers' Association continues to add new names to its list, although it was supposed to have nearly exhausted its field for much increase. Over thirty names have been added since July 1.

Corn of 1904 is of so good quality that shippers are not afraid of sending it to the Gulf for export and take the chances of heating; but, of course, it isn't good enough to inspect No. 2 at Chicago. Queer, isn't it?

A St. Louis telegram says Cleage, to thwart his creditors who entrusted their money with him for speculation, now pleads gambling. Of course, one might be sure he'd reach the limit of meanness somewhere; and he has.

The Northwestern Ohio Grain Dealers' Association met at Tiffin, on December 2, and, it is reported, "endorsed the uniform bill of lading." We don't believe the report; we don't believe the Northwestern Ohio dealers need conservators appointed yet, nor even an inquiry into their sanity.

Trading in pig iron warrants is now a regular thing on the New York Produce Exchange, where one can buy pig iron futures just as he can buy futures in wheat, corn, coffee or cotton, taking delivery at any point indicated by the holder of the certificate, the freight charges being equalized. This is an innovation, the success of which has yet to be demonstrated, but the directors of the Exchange believe it will be a go. The only immediate point of interest is the operation of the rule as to place

of delivery. Should it prove successful, it might be applied to grain contracts, it is thought.

Secretary Smiley is advised that fully three-fourths of the Texas corn crop of this season has been marketed, and that Texas buyers will be in the market for Western corn very soon. Secretary Dorsey of the Texas Association at Weatherford will furnish shippers with a list of regular dealers who can be relied on.

Baltimore is especially hard hit in the new freight schedule in effect December 5, by a rate of 17¼ cents on grain from the West, while Gulf ports yet retain the old rate of 11 cents, so that Baltimore gets a raise of 1½ and the Gulf ports nothing. When a quarter of a cent will turn the route of grain to or from a port, Baltimore as to the Middle West would seem to be out of the race from common points.

Some of the country buyers are rejecting new corn that is at all out of seasonable condition. It need not be said this is wise. Only cold weather will keep this kind of stuff from going to the bad, and the weather is a most uncertain quantity. If you must handle new corn that is suspicious, to keep your trade, buy it only on its merits. If the farmer is not satisfied with that, and you have no drier, let him carry it.

C. E. Jackson, one of the fathers of the Farmers' Exchange of Minnesota, has been deposed from the presidency of that organization by its trustees. Mr. Jackson's zeal for a friend, a candidate for Congress, led him into the blunder of "talking tariff" ex-officio. The Exchange is a little "trust" of its ownself, but the trustees could not tolerate a defense of "the lumber trust" by its own official. It has to draw the line somewhere, of course.

Already the chase has begun after the inspectorships and other places on the state grain inspection boards in Missouri and Minnesota, where the state administrations change on January 2. In St. Joseph, Mo., the candidate for the chief inspectorship is a man who has been in business for years as a dealer in horses and mules, but he thinks an \$1,800 job is worth running after. He has the endorsement of all the Democrats in his county (the state board in Missouri is bi-partisan), but so far as appears he has filed no other evidence of his qualifications to inspect grain.

Vice-President Nelson of the Seaboard National Bank of New York, on December 6, said that the banks of the country would in all probability make individual rulings as to the negotiability of the uniform bill of lading in event of its going into effect. Vice-President Ramsey, of the Mercantile National Bank, and other New York bankers frankly said that the new bill could not be used as collateral; while the Philadelphia Clearing House has practically ruled that banks in that city will not be permitted by that body to accept the new bill as collateral. Yet Mr. Kelley of the Philadelphia Trades League had the adamant nerve to come all the way to Chicago to tell the Commerce Commission that Philadelphia is satisfied with the

new bill and desired to be heard in opposition to the American Shippers' Association's complaint against it! Some people in Philadelphia ought to resurrect themselves.

New corn is doing very well, indeed, at Chicago, considering the habitual strenuousness of the inspection; and the cold weather will keep the stuff along up to the No. 3 notch, at least; but as Pope & Eckhardt Co. remind their patrons, "do not expect any soft, sappy stuff to inspect well—it won't."

Don't sign any bill of lading, receipt memorandum or shipper's order at the request of the railroad agent. These are all "kinks" accompanying the uniform bill of lading, which is not yet authorized, and which a determined opposition now may signally defeat. It is more than likely that in Eastern territory the new bill of lading may be offered shippers, seeing that 50 millions of them have been printed, but shippers may still protest and resist its use as a signed document.

The annual convention of Corn Growers and Stockmen will be held in the Agricultural Building of the University of Illinois from Monday, January 23, to Friday, February 3, inclusive. This convention is held under the auspices of the corn growers and stockmen of Illinois. It consists of general sessions at which addresses are given by experts in corn and stock growing, and of special sessions on various lines, including regular classes in corn judging, stock judging, dairying and farm mechanics.

The sailing ship owners' combination, formed last June to hold up the Pacific Coast wheat growers by a 30s. (\$7.20) rate to Europe, has been sadly disappointed. In the first place, the crop was 10,000,000 to 15,000,000 bushels shy of the combine's statistical estimates; then 10,000,000 to 13,000,000 bushels went east by rail instead of to Europe, and last of all the French subsidized sailers, being on a mileage basis, could not afford to stand a tie-up at a monthly loss of \$1,500 while lying idle. So instead of asking 30s., the sailers are glad to take 20s. (\$4.80), when they can get a cargo at all; and the British, Germans and Norwegians give thanks when the Frenchmen allow them to earn that much.

Supplemental to the various remarks on shortages printed elsewhere in these columns in this issue, Secretary Smiley of Kansas adds the testimony that the report of bad order cars as furnished by the Kansas City Weighing Department for the month of October, 1904, says the total number of cars weighed there was 5,141, of which there were leaking at grain doors, 362; without seals, 806; leaking at other places, 605. So that out of the 5,141 cars received 1,162 were leaking at grain doors and not sealed. "This is clearly the fault of the shipper," says Mr. Smiley, who adds emphasis to our own comments on the Foss and Peoria statements by saying, "and unless the shipper will exercise greater care in cooping cars, and when loading cars of 50,000 pounds or greater capacity by doubling

the doors, and know positively that all cars are sealed before leaving point of origin, you will continue to have losses."

There are some queer contentions in regard to the Atlantic ports' grain differentials. Baltimore and Newport News claim the differentials because they are nearer to the West than Philadelphia, New York or Boston; but Philadelphia, at a recent meeting, at least, set up as her claim that she had neither the facilities for loading grain nor the ships to load nor the depth of water to get ships to the high seas. Ordinarily, when business men are unable to compete in the matter of facilities for doing business, they either improve those facilities or go out of business. Is a community to be subject to a different law of trade? Certainly Philadelphia's rivals might have reason to complain if a premium were put upon inefficiency, when the spirit of the times everywhere demands as the first condition of success the highest efficiency in all things.

No one likes more to think in big figures than Secretary Wilson of the Agricultural Department; and this year he fairly wallows in the incomprehensible millions that measure in dollars the value of the products of the farms—\$4,900,000,000! Secretary Wilson does not hint at such a question, of course, but it is fair to ask, How much of this enormous valuation is due to the humble efforts of the country grain dealer, the public exchanges, the railways and all the other vast and complicated machinery of commerce and trade which gives to the products a place, time and form value they do not and cannot have on the farm? Secretary Wilson's pet, the farmer, is only partly "It" in this vast game; the men who buy and distribute, store and manufacture farm products are quite as much producers of "farm values" as the farmer himself, although the latter generally manages to ignore that fact.

There is a disposition on the part of the carriers to misrepresent the Quarles-Cooper bill now before Congress. The bill, should it become law, would give the Commerce Commission power to the extent that it might, after due hearing, pronounce rates and classifications to be unjust and unreasonable and set them aside until overruled by the courts on appeal of the carriers. One carrier has compared this to hanging a man and afterward hearing his appeal. But put it the other way, and the carrier proposes to hang the shipper and then let the courts listen to his appeal. It is as long as it is broad. But this is the only power of "making rates" the bill confers on the Commission and is no more than the Commission for some time after its creation exercised. The bill is supported by the Commerce Law Convention of manufacturers, but the opposition on the part of the carriers has the support at least of the New York Merchants' Association, which considers it "safer and wiser, for the present, at least, to rely upon the newly applied methods of enforcing the decisions of the Commission by injunction." But then in matters of this kind New York merchants are wholly out of touch with the public west of the Hudson. The New York

Manufacturers' Association, on the other hand, indorses the bill.

At a meeting of the Central Branch of the Indiana Grain Dealers' Association it was claimed that at a certain town in the Association's territory the owner of a new elevator that cost \$10,000 found it impossible to get a single car to make shipments, while the company's station agent did all the business. No wonder Indiana shippers are working "tooth and nail" to get a state railroad commission with authority to veto that kind of favoritism.

In the wheat smuggling cases on the Canadian frontier of North Dakota several parties were arrested and both the wheat and the wagon in which it was found with the horses were confiscated. As, however, the government is required to show an intent to defraud, it is understood all of the men accused will defend with the claim that they had no intention of defrauding the government, but that they all intended to report to the customs officials and pay the duty as soon as they found out at the elevators exactly how much wheat they had. The government may have some difficulty in proving that the men did not really intend to do this, for they did not wait long enough to give the men a chance to pay up.

The decision in the American Malting Co. case, holding Mr. A. M. Curtiss liable to the company's stockholders in the sum of \$1,087,074, being the amount of several dividends paid out of the capital of the company and not out of its net profits or surplus, is strictly in accord with New Jersey law. It was not necessary to show an ulterior motive, such as the effect of these 7 per cent payments on promoter's shares which the directors personally might like to unload—that was not necessary; but one can readily see that the decision is likely to put a damper on that particular kind of mean and "frenzied finance." The court was exceedingly self-restrained when he contented himself with saying that to "ask directors to obey the law did not seem to him to be asking too much."

Since a couple of years ago, when Montreal's Harbor Commissioners went into "municipal trading" as an owner and operator of a public grain elevator, their experiment has been watched with considerable interest on this side the line. It is true the behavior of the Commission in the matter of the engineering and the subsequent construction and equipment of the elevator was more or less puerile; but once the plant had been finished, then, it was expected, the Commission would imitate the apostle who, when he "became a man, put away childish things." This has in part been so. "The testing committee, in whose hands it has been since midsummer, have," as the public has been told, "seen fit to accept only a comparatively small amount of wheat, preferring not to run the risk of boxing up grain which might be wanted for immediate shipment, in the event of something going wrong with the machinery." (Sic.) However, all is now "plain sailing." The elevator has "now passed the half-million bushel mark, and from now (November 12) till the end

of the season will be working busily. Already it has made changes for the better in the transportation of wheat. The grain boats from Kingston, instead of waiting some time to unload into the ships, as in former years, are discharged immediately into the elevator and could make two or three trips where formerly they made but one." So in spite of the petty red-tape delays, the elevator really promises to do something and be a factor in the Canadian traffic in grain.

The important fact appears in a decision abstracted in the department of "Court Decisions" that the right of recovery for losses of grain in transit does not lie in Kansas in the consignor, but in the consignee. The court says the legislature was evidently trying to protect the bankers and receivers, who, in the case of a vast proportion of grain shipments, advance money on the bills of lading or drafts before the grain has arrived at destination, and that this law assumes that by the time the grain has arrived at destination it has substantially passed out of the hands of the consignor as owner, or that his pecuniary interest in it is too small to permit him to pose as owner. Shippers will therefore have to take this principle into account. We presume, of course, that the presumptive ownership may be retained by the consignor by the proper form of endorsement of the bill of lading made to shipper's order. In case of doubt as to his rights, and the proper procedure to protect them, the shipper will do well to consult his attorney on the matter.

Those who read this paper need not be reminded of the truth of Mr. Stickney's contention in the paper by him printed on another page, that a public grain or produce exchange, consisting, as it does, of "a large number of active, intelligent grain dealers congregated in a market town, intent upon making a profit of an eighth to a quarter of a cent per bushel for themselves," in the very nature of things, which they could hardly prevent if they desired to do so, "are compelled to make more for the farmers than they do for themselves." Keeping in telegraphic touch with all the markets of the world and with consumers of grain, in order to take advantage of the slightest increase in the demand, which would advance prices, they also keep informed as to all the channels of transportation which reach such markets and consumers, in order to be prepared at all times to avail themselves of the cheapest means of transportation to reach the area of highest prices as they develop from day to day, and so perform a work for the farmers which the farmers, living on their own isolated farms, cannot do for themselves. It is work which even the legislature cannot do for them." Yet the meanest of the demagogues of the press or stump finds it the easiest matter in the world to make the farmers believe the grain dealer is a habitual robber, and that the only man who can safely be trusted to perform the functions of a distributor of grain and its products is a loud talker who, commercially speaking, could hardly follow a car of corn across his own county line and know what to do with it afterwards.

TRADE NOTES

The E-Z Grain Bag Holder and Manufacturing Company has been incorporated at Milwaukee, Wis., with a capital stock of \$21,000, by F. R. Payne, Geo. H. Keerl and Mrs. N. E. Payne.

The Jeffrey Manufacturing Company of Columbus, Ohio, has issued a handsome catalogue devoted to the Jeffrey pulverizing machinery. Those interested in the subject can secure a copy upon request.

The N. P. Bowsher Company of South Bend, Ind., has been awarded the gold medal on its display of feed mills at the St. Louis Exposition. This exhibit was a fine one and attracted a great deal of attention.

A souvenir pin tray is being sent out by Palmer & Miller, grain, seeds and wool, of Celina, Ohio, to remind their customers that the holiday season is at hand. Recipients will find the tray a handy addition to the furnishings of their desks.

"Booklet No. 16" of the Borden & Selleck Company, Chicago, is devoted to freight handling machinery for conveying and elevating boxes, barrels, bales, etc. It contains a large amount of information relative to appliances of this character and will be sent free upon application.

C. A. McCotter, secretary of the Grain Dealers National Mutual Fire Insurance Co. of Indianapolis, Ind., has mailed leaflets to renew his calendar pad, commencing December 1. One of the good points about the calendar is the footnotes on insurance. Elevator men can read and profit thereby.

The Richardson Scale Company has installed one of its automatic scales for D. I. Bushnell & Co. of St. Louis, Mo., to be used in weighing grain, seeds, etc. One of company's six-bushel automatic scales will also be installed in the El Paso, Texas, elevator of the J. Rosenbaum Grain Company.

Harris-Scotten Company have ordered a No. 6 Hess Drier to be erected at the Santa Fe Elevator, Chicago. This will be in addition to the drier of this size installed by the Richardson Company at the same elevator five years ago and will increase the drying capacity at that house to 25,000 to 30,000 bushels daily.

C. F. Haglin, Minneapolis, Minn., is building a square bin, steel and concrete grain elevator for corn and rice in the southern part of old Mexico, on the plantation of the Tobasco Plantation Co. It is a working house of 50,000 bushels' capacity, corn being husked, shelled and dried in the house, and is said to be the first modern elevator to be built in that territory.

The "Season's Greetings" is the inscription on a wall hanger which C. A. Burks, the elevator broker of Decatur, Ill., is sending to his friends in the trade. It is a panel $9\frac{1}{2} \times 13\frac{1}{2}$ inches in size, showing a draped female figure holding aloft a card bearing the words "Season's Greetings" in gold letters. The figure, being embossed, stands out from the background, which is tinted in such a manner that the effect produced is indescribably beautiful.

The Chicago-Rock Island Railroad Company has ordered a No. 10 Hess Grain Drier to be erected at once at the Counselman Elevators in South Chicago, recently purchased by that company. This drier is equaled in size by only one drier in existence, this being the No. 10 drier now erecting in New Orleans for the Illinois Central Railroad. On ordinary grain it will have a capacity of 35,000 to 40,000 bushels daily. It will be equipped with steam coils containing nearly 30,000 lineal feet of one-inch steam pipe, through which over 100,000 cubic feet of air will pass every minute, this air to be applied to the grain at a temperature of 140 to 160 degrees. The drying effect of such a volume of warm air can readily be imagined. This is the second large Hess Drier installed in South Chicago, the first being that erected last year for Bartlett, Frazier, Carrington & Co.

The Rock Island drier will be ready for use about January 1. A No. 3 Hess Grain Drier, with a capacity of 2,000 bushels in 24 hours, has been purchased by the Rolfe Grain Company of Rolfe, Iowa, and is now being put in operation.

The Webster Manufacturing Company of Chicago, through its New York branch, 38 Dey Street, New York City, has been awarded the contract for all the power transmitting, elevating, conveying and coal-handling machinery, etc., required in the complete equipment of the new mill being erected in New York City for the Hecker, Jones, Jewell Milling Company. The general contractor is the Barnett & Record Company of Minneapolis, W. D. Gray of Milwaukee being the consulting engineer.

The Midland Machinery Co. of Minneapolis, Minn., will make a number of important changes in their machine shop at No. 412 So. Third Street, Minneapolis, Minn., after January 1. The office, which now occupies the front of the machine shop, will be moved to the floor above, and the entire first floor of the building will be given to the shops. New machinery will be added and the force of workmen will be increased so as to turn out more rapidly their line of grain elevator specialties, which have become very popular in Western and Northwestern territory.

The 1905 calendar which is being sent out by the Union Iron Works of Decatur, Ill., although intended to advertise the company's business, is essentially a work of art. It is in the form of a hanger, 21x26 inches, the principal feature being a panel, 9x16 inches, showing the heads of four horses. The picture is the reproduction of a famous painting and is copied by the three-color process with such fidelity that it is hard to realize that one is not gazing on an original work in oil. The calendar pad is a large one and the figures are of a size to be easily read from any point of view.

The Hall Distributor Co. of Omaha, Neb., have had calls for their Signaling Grain Distributor and Non-Chokable Boots from France, Germany, Austria and New Zealand, but not having taken out patents in those countries, they have heretofore declined to engage in exporting them. Now, however, they are arranging with a large construction and engineering company in Brunswick, Germany, who have branch houses in all countries in Europe and in the Argentine Republic, South America, to handle their devices. Their distributor is being manufactured in several places in Canada, and it is predicted by the company that they will now be used in all the grain-growing countries of the world.

The Froggatt Scale Company of Chicago has recently been incorporated to build railroad track scales, hopper scales and wagon, portable and dormant scales of all kinds and sizes. The company will also manufacture the Froggatt Rotary Sack Scale, which is a triple scale for handling rapidly and sacking such materials as grain, flour, coffee, fertilizer, etc. The present plant and equipment of the company, including a few minor changes and additions in machinery, will be utilized for the time being, but important extensions are contemplated during the coming year in both the building and its equipment. The incorporators of the company are Hiram A. Haines, S. K. Challman and George H. Froggatt.

A new catalogue describing the many graphite lubricants manufactured by the Joseph Dixon Crucible Co., Jersey City, N. J., has just been issued. The introduction deals in a general way with the growth of the graphite industry, the theory of graphite lubrication, the special advantages of flake graphite in contrast to amorphous graphite and the practical relation of graphite to the theory of lubrication. "It is a fact worthy of greatest emphasis that bearings absolutely cannot 'seize' or cut when ever an infinitely thin film of flake graphite coats the friction surfaces. If Dixon's Flake Graphite could do nothing else for the operator of machinery its importance in averting troubles and shutdowns and perhaps disasters, due to the seizure or bear-

ings, cannot be overestimated." The book further describes the various lubricating graphites and graphite lubricants of the Dixon Company, including their general uses and the retail prices of the different sized packages. Among them are mentioned Dixon's Ficonderoga Flake Graphite, Special Graphite No. 635, Heavy Graphite Machine Grease, Waterproof Graphite Grease, Graphite Cup Greases, Axle Grease, Automobile and Cycle Lubricants, Handy Graphite Rope Dressing and Graphite Pipe Joint Compound. Copies of this interesting catalogue will be freely sent upon request to the Joseph Dixon Crucible Co., Jersey City, N. J.

MORE COMPLAINTS OF RATES.

As this number of the "American Elevator and Grain Trade" goes to press the Commerce Commission is at Louisville making an enquiry into rates and practices in relation to grain and grain products to and from Louisville and other Ohio River points. The roads cited to make defense are the L. & N., Southern, I. C., Big Four, B. & O. S., Pennsylvania, L. H. & St. L., M. & O., Alton, C. & O., N. & W. and N. C. & St. L. The basis of the complaint which necessitated the hearing was as follows:

1. That the rate on grain and grain products from St. Louis or East St. Louis to points in territory south of the Ohio and Potomac rivers passing through Louisville is higher than the rate from St. Louis, or East St. Louis to Louisville, added to the rate from Louisville to the point of destination, and that the same is true of the through rate as compared with the combination rate via other Ohio River crossings.

2. That a proportional rate of 4 cents per 100 pounds is in force to Louisville from St. Louis and East St. Louis, on traffic originating beyond, and that when the grain or grain product is reshipped from Louisville to points in Southeastern territory, including Virginia, the line south or east of Louisville shrinks its rate a maximum of 3 cents per 100 pounds, leaving a net charge, St. Louis or East St. Louis to Louisville, of 1 cent per 100 pounds, and that this is done to make the rate via Louisville equal the rate via Cairo, such rate being 1 cent St. Louis to Cairo, and from Cairo the same as the rate from Louisville and other Ohio River crossings.

3. That shrinking the rates as aforesaid results in a lower combination through New Albany, Ind., than via Cairo.

4. That through substitution at Louisville of expense bills on St. Louis or East St. Louis traffic for expense bills on like traffic brought from points in Indiana, Illinois, Ohio and even points south of Louisville, the local rate out of Louisville is cut under the practice above mentioned, and that by manipulation of expense bills or diversion to local use of shipments from points north or west of the Ohio River to Louisville, and destined beyond, local consumers of grain or grain products in Louisville are enabled to secure the transportation of such traffic at rates considerably and often far below the established tariffs charged.

5. That the aforesaid conditions result in unreasonable through rates, unjust discrimination and undue preference and advantage as between persons, places and shipments from St. Louis or East St. Louis and other points of origin, and in charges less than those named in published tariffs.

Nashville, Tenn., handled through its grain dealers in the year ended July 1, 1904, 5,356 cars of hay and 24,192 cars of grain. The total amount realized from these sales was \$18,936,864.26.

The Texas Railroad Commission has issued notice of a hearing for January 17, 1905, to consider an entire revision of the rates on grain, flour, cereals, hay, etc., making pronounced reductions.

"Dad," said little Reginald, "what is a bucket-shop?" "A bucket-shop, my son," said the father, feelingly—"a bucket-shop is a modern coöperation establishment to which a man takes a barrel and brings back the bung-hole."

The car sweeping nuisance still continues to infest certain Northwestern terminals. At Superior, Wis., recently a grist of offenders was brought in and fined, chief of the bunch being a Mrs. Antoinette Lund of Itasca, who managed a sort of clearing house for the sweepers, and has had at times as much as 100 to 200 bushels of wheat on hand at one time. She was fined \$17 and costs.

VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, Dec. 10, 1904, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, bu.	Oats, bu.	Rye, bu.	Barley, bu.
Baltimore.....	984,000	496,000	158,000	311,000	.....
Boston.....	81,000	101,000	490,000	.....	.....
Buffalo.....	4,035,000	105,000	2,370,000	672,000	2,688,000
do. afloat.....	.....	.....	.....	.....	.....
Chicago.....	1,702,000	443,000	5,144,000	589,000	12,000
do. afloat.....	.....	.....	.....	.....	.....
Detroit.....	786,000	68,000	135,000	38,000	53,000
do. afloat.....	.....	.....	.....	.....	.....
Duluth.....	2,080,000	.....	2,976,000	112,000	278,000
do. afloat.....	.....	.....	.....	.....	.....
Ft. William.....	1,274,000	.....	.....	.....	.....
do. afloat.....	.....	.....	.....	.....	.....
Galveston.....	214,000	86,000	.....	.....	.....
do. afloat.....	.....	.....	.....	.....	.....
Indianapolis.....	873,000	73,000	218,000	1,000	.....
Kansas City.....	1,708,000	221,000	444,000	.....	.....
Milwaukee.....	692,000	31,000	433,000	39,000	246,000
do. afloat.....	.....	.....	.....	.....	.....
Minneapolis.....	12,457,000	21,000	5,848,000	90,000	1,009,000
Montreal.....	526,000	19,000	173,000	.....	117,000
New Orleans.....	526,000	423,000	.....	.....	.....
do. afloat.....	.....	.....	.....	.....	.....
New York.....	1,071,000	281,000	1,529,000	151,000	375,000
do. afloat.....	.....	.....	.....	.....	.....
Peoria.....	1,000	304,000	1,509,000	12,000	3,000
Philadelphia.....	36,000	274,000	157,000	8,000	.....
Port Arthur.....	986,000	.....	.....	.....	.....
do. afloat.....	.....	.....	.....	.....	.....
St. Louis.....	3,107,000	62,000	1,094,000	12,000	28,000
do. afloat.....	.....	.....	.....	.....	.....
Toledo.....	242,000	224,000	894,000	12,000	4,000
do. afloat.....	.....	.....	.....	.....	.....
Toronto.....	15,000	.....	4,000	.....	.....
On Canal.....	.....	.....	.....	.....	.....
On Lakes.....	4,759,000	1,315,000	521,000	142,000	946,000
On Miss. River.....	.....	.....	.....	.....	.....
Grand total.....	37,108,000	4,565,000	24,201,000	1,998,000	5,753,000
Corresponding date 1903.....	34,404,000	5,593,000	8,277,000	1,159,000	5,932,000
Weekly Inc.....	245,000	1,364,000	.....	.....	.....
Weekly Dec.....	.....	.....	296,000	25,000	773,000

WHEAT RECEIPTS AT PRIMARY MARKETS.

The wheat receipts at eight primary markets, during the 23 weeks ending December 5, for the last two years, according to the Cincinnati Price Current, were as follows:

	1904-5.	1903-4.
St. Louis.....	14,388,000	13,844,000
Toledo.....	2,865,000	3,860,000
Detroit.....	1,720,000	1,284,000
Kansas City.....	24,791,000	22,559,000
Winter wheat.....	43,864,000	41,357,000
Chicago.....	16,823,000	17,690,000
Milwaukee.....	4,444,000	4,986,000
Minneapolis.....	45,314,000	45,314,000
Duluth.....	19,256,000	21,807,000
Spring wheat.....	85,834,000	89,857,000
Aggregate, 23 weeks.....	129,698,000	131,214,000

FLAXSEED AT CHICAGO.

The receipts and shipments of flaxseed at Chicago during the 16 months ending with Nov., as reported by Chas. F. Lias, flaxseed inspector of the Board of Trade, were as follows:

Months.	Receipts.		Shipments.	
	1904-05.	1903-04.	1904-05.	1903-04.
August.....	277,990	345,226	200,620	97,809
September.....	310,000	102,620	119,049	162,900
October.....	475,600	530,960	34,776	166,049
November.....	315,900	708,953	22,103	44,057
December.....	250,979	.....	78,274	90,906
January.....	307,976	.....	.....	.....
February.....	212,736	.....	60,764	.....
March.....	412,554	.....	49,694	.....
April.....	68,000	.....	28,326	.....
May.....	90,100	.....	34,079	.....
June.....	453,467	.....	15,055	.....
July.....	165,769	.....	45,931	.....
Total bushels.....	1,879,490	3,649,340	376,548	866,544

EXPORTS FROM ATLANTIC PORTS.

The export of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from the Atlantic ports during the two weeks ending Dec. 10, 1904, as compared with same weeks last year, have been as follows:

Articles.	For Week Ending Dec. 10. Dec. 12.		For Week Ending Dec. 3. Dec. 5.	
	1904.	1903.	1904.	1903.
Wheat, bushels.....	238,000	1,149,000	269,000	1,766,000
Corn, bushels.....	642,000	894,000	570,000	930,000
Oats, bushels.....	2,000	106,000	6,000	52,000
Rye, bushels.....	.....	.....	.....	18,000
Barley, bushels.....	.....	10,000	400,000	4,000
Flour, bbls.....	46,800	471,700	132,200	408,000

RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of November, 1904:

BALTIMORE—Reported by H. A. Wroth, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1904.	1903.	1904.	1903.
Wheat, bushels.....	237,061	271,216	208,532	.....
Corn, bushels.....	577,313	1,327,575	2,320	1,414,630
Oats, bushels.....	172,638	346,517	20,200	40
Barley, bushels.....	10,208	.....	.....	.....
Rye, bushels.....	227,959	62,738	8,571	.....
Timothy Seed, lbs.....	5,128	7,104	5,397	0,934
Clover Seed, lbs.....	4,118	1,548	3,560	2,042
Hay, tons.....	5,355	5,656	1,025	1,853
Flour, bbls.....	188,491	444,608	78,645	233,429

BOSTON—Reported by Elwyn G. Preston, secretary of the Chamber of Commerce.

Flour, bbls.....	152,338	171,781	56,398	49,448
Wheat, bushels.....	348,361	969,552	221,706	794,069
Corn, bushels.....	224,570	741,621	119,767	782,340
Oats, bushels.....	527,442	497,368	1,360	44,940
Rye, bushels.....	6,750	2,845	.....	.....
Barley, bushels.....	108,561	51,758	37,836	52,356
Flax Seed, bushels.....	1,123	.....	.....	.....
Mill Feed, tons.....	1,480	1,816	140	185
Cornmeal, bbls.....	1,568	1,185	2,128	3,815
Oatmeal, bbls.....	6,777	14,020	1,375	5,484
Oatmeal, sacks.....	800	11,220	4,070	18,105
Hay, tons.....	11,230	13,450	152	570

BUFFALO—Reported by F. Howard Mason, secretary of the Chamber of Commerce.

Wheat, bushels.....	5,019,457	9,334,633	1,211,000	1,301,000
Corn, bushels.....	1,976,902	5,173,168	1,286,500	3,063,100
Oats, bushels.....	3,535,419	2,546,396	2,228,000	1,821,000
Barley, bushels.....	4,195,839	3,189,357	767,000	711,800
Rye, bushels.....	404,227	661,872	234,000	14,000
Timothy Seed, lbs.....	.....	.....	.....	.....
Clover Seed, lbs.....	.....	.....	.....	.....
Other Grass Seed, lbs.....	.....	.....	.....	.....
Flax Seed, bushels.....	1,727,677	3,317,300	.....	.....
Broom Corn, lbs.....	.....	.....	.....	.....
Hay, tons.....	1,418,158	1,748,522	.....	.....

CHICAGO—Reported by Geo. F. Stone, secretary of the Board of Trade.

Wheat, bushels.....	2,685,345	5,219,530	2,753,863	3,241,718
Corn, bushels.....	7,436,500	6,617,275	4,190,651	7,689,717
Oats, bushels.....	4,436,421	6,979,644	4,082,088	4,777,916
Barley, bushels.....	2,914,160	4,035,856	1,128,245	424,721
Rye, bushels.....	200,861	267,636	378,978	184,743
Timothy Seed, lbs.....	5,300,958	5,357,496	5,357,496	1,841,583
Clover Seed, lbs.....	800,983	667,705	928,757	602,140
Other Grass Seed, lbs.....	1,134,719	2,196,770	1,018,549	4,763,467
Flax Seed, bushels.....	311,904	723,216	15,514	20,995
Broom Corn, lbs.....	1,892,842	2,026,500	658,079	1,307,895
Hay, tons.....	25,382	19,517	1,133	1,201
Flour, bbls.....	724,530	774,999	551,184	516,202

CINCINNATI—Reported by C. B. Murray, superintendent of the Chamber of Commerce.

Wheat, bushels.....	175,275	155,496	138,621	144,120
Corn, bushels.....	490,402	451,736	108,506	211,154
Oats, bushels.....	367,637	266,542	160,383	148,243
Barley, bushels.....	141,340	158,800	8	1,621
Rye, bushels.....	79,568	49,962	11,287	7,041
Timothy Seed, bags.....	5,890	5,911	1,227	1,654
Clover Seed, bags.....	1,669	3,311	415	1,178
Other Grass Seed, bags.....	10,065	12,211	7,264	7,980
Broom Corn, lbs.....	.....	.....	.....	.....
Hay, tons.....	7,819	9,902	4,169	5,066
Flour, bbls.....	113,828	132,582	93,952	83,513

CLEVELAND—Reported by F. A. Scott, secretary of the Chamber of Commerce.

Wheat, bushels.....	104,701	34,098	17,806	50,400
Corn, bushels.....	625,773	499,969	357,534	293,145
Oats, bushels.....	868,188	518,813	286,883	166,810
Barley, bushels.....	30,315	4,776	.....	1,660
Other Cereals.....	890	600	.....	.....
Flaxseed, bushels.....	.....	.....	.....	.....
Hay, tons.....	6,230	6,467	1,187	1,234
Flour, bbls.....	7,207	4,735	2,527	1,898

DETROIT—Reported by F. W. Waring, secretary of the Board of Trade.

Wheat, bushels.....	290,248	352,242	26,550	38,662
Corn, bushels.....	291,303	489,058	28,030	60,388
Oats, bushels.....	307,671	323,455	86,528	64,410
Barley, bushels.....	362,071	425,963	10,789	16,586
Rye, bushels.....	23,431	77,226	13,748	44,594
Flour, bbls.....	27,600	25,900	13,800	14,000

DULUTH—Reported by H. B. Moore, secretary of the Board of Trade.

Wheat, bushels.....	5,317,513	7,617,815	5,267,599	8,024,145
Corn, bushels.....	1,420,857	1,072,537	1,730,142	1,012,471
Oats, bushels.....	1,728,005	1,249,101	2,349,252	1,815,182
Barley, bushels.....	230,483	217,576	188,512	239,649
Rye, bushels.....	5,445,438	5,327,120	3,218,118	5,054,694
Flax Seed, bushels.....	607,795	864,530	744,950	943,530

GALVESTON—Reported by C. McD. Robinson, chief inspector of the Cotton Exchange and Board of Trade.

Wheat, bushels.....	.....	.....	1,796,000	.....
Corn, bushels.....	.....	.....	255,960	241,856
Rye, bushels.....	.....	.....	.....	.....

KANSAS CITY—Reported by E. D. Bigelow, secretary of the Board of Trade.

Wheat, bushels.....	3,225,600	4,051,200	2,416,500	3,170,400
Corn, bushels.....	758,700	454,400	499,300	284,000
Oats, bushels.....	638,400	446,400	439,200	361,600
Barley, bushels.....	43,000	134,000	1,000	22,000
Rye, bushels.....	39,800	52,000	12,800	43,200
Flax Seed, bushels.....	4,000	1,600	1,600	.....
Hay, tons.....	12,800	8,380	3,370	3,080
Flour, bbls.....	.....	.....	126,800	128,600

MILWAUKEE—Reported by Wm. J. Langson, secretary of the Chamber of Commerce.

Wheat, bushels.....	949,066	1,435,520	190,114	622,120
Corn, bushels.....	148,200	139,650	58,300	117,430
Oats, bushels.....	594,700	546,100	504,319	428,359
Barley, bushels.....	2,263,300	2,584,100	1,793,427	1,689,527
Rye, bushels.....	195,200	105,000	15,275	.....
Timothy Seed, lbs.....	182,640	410,012	222,000	443,025
Clover Seed, lbs.....	609,993	125,700	166,725	43,423
Flax Seed, bushels.....	28,800	27,000	.....	900
Hay, tons.....	2,218	1,734	57	.....
Flour, bbls.....	438,025	456,625	382,460	436,275
Feed, tons.....	.....	.....	.....	.....

MONTREAL—Reported by George Hadrill, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1904.	1903.	1904.	1903.
Wheat, bushels.....	2,296,326	1,976,373	1,007,649	2,278,064
Corn, bushels.....	146,696	182,138	217,217	6,106,674
Oats, bushels.....	138,070	66,565	52,808	72,082
Barley, bushels.....	425,317	26,400	396,026	323
Rye, bushels.....		2,715		685
Flaxseed, bushels.....	1,490	116,614		
Flour, barrels.....	113,678	136,047	196,601	223,843

ELEVATOR AND GRAIN NEWS

ILLINOIS.

M. M. Jacoby has sold his grain business at Arlington, Ill.

Miller & Graves are remodeling their elevator at Duncan, Ill.

The grain elevator at Cairo, Ill., is reported to have been reopened.

M. R. Corbett of Niantic, Ill., has bought an elevator at Rosemond, Ill.

T. J. Campbell of Penfield, Ill., is building an elevator at Griffith, Ill.

Work has been commenced on the new Farmers' Elevator at Ransom, Ill.

The Rogers Grain Co. has completed its new elevator at Graymont, Ill.

M. R. Allsup's new elevator at Maroa, Ill., is completed and in operation.

The Farmers' Elevator Co. of Wapella, Ill., has completed its new corn crib.

Charles Cade has installed a new grain dump in the elevator at Bondville, Ill.

Koch Bros. are building an elevator on the site of the old flour mill at Breese, Ill.

James Shuman of Vanderville, Ill., has engaged in the grain business at Palmer, Ill.

Fleming & Brown have sold their elevator at Buckingham, Ill., to Inkster & Lamareau.

The new grain firm of Davison & Sprinkel, at Rock Falls, Ill., has commenced business.

A 17-horsepower gasoline engine has been placed in Carlisle & Hodam's elevator at Downs, Ill.

William Murray's enlarged and remodeled elevator at Ludlow, Ill., is again open for business.

The Sidney Farmers' Elevator Co. of Sidney, Ill., has changed its name to Sidney Grain Co.

The Drummer Grain Co. has about completed a new elevator at Gibson City, Ill., at a cost of \$4,500.

Samuel L. Hamilton has installed a new steam engine and a corn sheller in his elevator at Ashland, Ill.

The Northwestern Elevator Co. is equipping its elevator at Akron, Ill., with an improved Hall Distributor.

Swearingen & Walker of St. Joseph, Ill., have completed their new elevator on the Frisco Railway near Glover, Ill.

The foundation for the Rogers Grain Co.'s new elevator at Charlotte, Ill., is in and work on the superstructure is in progress.

B. S. Tyler & Co. of Decatur, Ill., have sold their 15,000-bushel elevator at Camargo, Ill., to the National Elevator Co. for \$5,000.

Ross Hockaday has sold his grain, coal and lumber business at Oreana, Ill., to the Shellabarger Elevator Co. of Decatur, Ill.

The Turner-Hudnutt Co.'s elevator at Pekin, Ill., was operated day and night the latter part of November to handle the rush of grain.

A. W. Heinz is building an addition to his elevator at Mahomet, Ill., for the storage of ear corn. It will be 16x30 feet and 32 feet high.

J. A. Taylor and Mark Fisher of Arrowsmith, Ill., have purchased Taylor Bros.' elevator at Emington, Ill. Mr. Fisher will have charge.

Campbell & Co. have given the contract to the Burrell Engineering and Construction Co. for the erection of a 30,000-bushel grain elevator at Gifford, Ill.

H. C. Suttle has sold his elevator, cribs, etc., at Lake Fork, Ill., to Lewis Zelle. The consideration was \$5,000. The elevator is located on the I. C. right-of-way.

The grain business of Suffern, Hunt & Co., Decatur, Ill., has been incorporated with a capital of \$50,000. W. H. Suffern, R. I. Hunt and Annie P. Hunt are the incorporators.

The Anchor Farmers' Elevator Co. of Anchor, Ill., has been making extensive improvements to its elevator. Two new dumps have been added, a cupola built and other changes made.

The Forest City Grain Co., capitalized at \$6,000, has been chartered at Forest City, Ill., to deal in grain, seeds and fuel. The incorporators are: W. S. Benscoter, H. J. Kreiling and James Rowley.

The Burrell Engineering and Construction Co. of Chicago, Ill., has prepared plans and has the general contract for the erection of a 20,000-bushel elevator at Seward, Ill., for the B. P. Hill Grain Co.

of Freeport, Ill. It will be of crib construction, metal clad, 26x26 feet in size and 40 feet high. The estimated cost is \$4,500.

John Houchin has sold his grain, seed and fuel business at Newton, Ill., to T. F. Morey of Hunt, Ill., and Frank Vice of Olney, Ill. It is said that Mr. Houchin contemplates removing to Mississippi.

M. A. Current, who sold his elevator at State Line some time ago and moved to St. Joseph, Ill., has purchased the elevator at Newman, Ill., and taken possession. The consideration is reported at \$12,000.

The Farmers' Grain and Live Stock Co., whose elevator at Morton, Ill., was burned recently, has completed the foundation for a new elevator. A portable dump will be used until the new house is completed.

The Hasenwinkle Grain Co. has completed a new coal house at Heyworth, Ill., to use in its fuel business. The building is 13x65 feet in ground dimensions and is built of concrete blocks with a concrete floor.

The Knight Grain Co. has sold its grain business at Monticello, Ill., to Bartlett, Frazier & Carrington of Chicago. The business was established in 1872 by E. G. Knight, who is the oldest grain dealer in Piatt County.

N. A. Grabill of Daleville, Ind., has just completed a new 30,000-bushel elevator at Mattoon, Ill., for the Cleveland Grain Co. It is a model plant and is equipped with modern machinery. Rope transmission is used throughout.

John Lowry, a grain dealer of Fairland, Ill., will erect an elevator at Bongard, Ill., a new station on the Frisco. The owner of the town-site has granted Mr. Lowry a free site and the railroad company will put in a sidetrack to the elevator.

The Bonfield Grain and Lumber Co. has been incorporated at Bonfield, Ill., with a capital of \$10,000, to deal in grain, produce and building material. Henry Gaus, Peter Gaus and George Van Voorst are the incorporators. An elevator will be built.

R. H. Bullington has sold his elevator at Tower Hill, Ill., to the Barton-Price Co., hay and grain dealers of Louisville, Ky. The new owners have taken possession and will operate the elevator with George Tressler as manager. The company has several elevators in that section.

E. D. Risser, who recently purchased the Filson Elevator at Paxton, Ill., is building a new frame elevator, 27x37 feet in size and 72 feet high. The old elevator has been torn down. The new house is of crib construction, with a concrete foundation, and will have a capacity of 25,000 bushels.

The Harris-Scotten Co. will install a No. 6 Hess Drier at the Santa Fe Elevator, Chicago, to be used in connection with the one installed about five years ago, when the Richardson Co. was operating the house. The drying capacity of the house will be between 25,000 and 30,000 bushels a day when the new equipment is in.

Marshall Bros. have sold their grain, feed and coal business at Belvidere, Ill., to Hyland Bros. of Cherry Valley, Ill., possession being given on November 30. Arthur Hyland has taken charge of the business at Belvidere and the two other brothers, Edward and Charles Hyland, will continue their grain business at Cherry Valley.

The control of the Bradford Grain Co. of Bradford, Ill., has changed hands. About a year ago the company was made up of the Houghton Lumber Co., which held a one-half interest, and A. N. Harwood and J. P. Code, each owning a one-fourth interest. Mr. Harwood later sold his interest to Mr. Code. Now the Houghton Company has sold out to A. N. Harwood and he took over the business on December 1.

The Hawkeye Elevator, including the machinery and 635x260 feet of land, in West Hammond, Ill., on the Chicago, Hammond & Western Railway, was sold at judicial sale on the Chicago Real Estate Board December 6 to Richard Fitzgerald of the Chicago Junction Railway Co. for \$60,000. The purchaser owned a majority of the bonds, and suit had been brought by the Northern Trust Co. against the Hawkeye Elevator Co. on account of default in the interest on the bonds.

G. W. Townsend of Sidney, Ill., has sold his elevator at that point to Allen B. Smith of Rosemond, Ill. Mr. Townsend's property at Sidney consists of a small grain elevator of large capacity and a steam power ear corn elevator, as well as considerable outside crib room for ear corn. The property is the most centrally located plant in Sidney and has always enjoyed a good patronage. Mr. Smith, it will be remembered, was until recently in the grain business at Rosemond, Ill., where he enjoyed the confidence of the people and a liberal share of their patronage. He took possession December 1 and will move his family

to his new location as soon as a suitable residence can be secured. The deal for the sale of the plant was closed by C. A. Burks, the elevator broker, Decatur, Ill.

The Harris-Scotten Co. has leased the Iowa Elevator on the south branch of the Chicago River, this city, from the receivers representing the Chicago Elevator and Terminal Co. The Iowa Elevator has a capacity of 1,500,000 bushels, and with this acquisition Harris-Scotten control storage capacity of 6,000,000 bushels on the Chicago River, the other houses being the Santa Fe, the Union and the National. The Iowa is fully equipped with a complete drying plant, which is understood to be the reason for the lease.

The Shellabarger Elevator Co. of Decatur, Ill., has purchased J. M. Ledden's elevator at Osgur, Ill. Mr. Ledden has been engaged in the grain business at that point for a number of years and will manage the elevator for the new owners. The house is not a large one, but is located in a good grain territory. The Shellabarger Elevator Co. will rebuild the cribs and make some improvements to the elevator and machinery. The intention is to entirely rebuild the plant next summer. The sale of the property was made through C. A. Burks, the elevator broker, Decatur, Ill.

J. L. Belden of Dalton City, Ill., has just closed a deal whereby he has sold his elevator and grain business at that point to the Dalton City Grain Co. Willis Peck, formerly of Peck & Son, Monticello, Ill., who sold out some months ago, is manager of the new company. He is an experienced grain man and will have charge of the business. Mr. Belden sold his general merchandise business at Dalton City some time ago and will take a needed rest. He will remain in Dalton City until the first of the year closing up his affairs. The new owners of the elevator will make some necessary repairs. The sale of the property was negotiated by C. A. Burks of Decatur, Ill.

IOWA.

An elevator will be built at Lancaster, Iowa.

Coddington & Laird have leased the Rock Island Elevator at Waverly, Iowa.

A farmers' elevator is projected at Woolstock, Iowa. I. Watkins is the promoter.

The Northern Grain Company will put in an extensive lumber yard at Mt. Vernon, Iowa.

F. M. Campbell is rebuilding his elevator at Randolph, Iowa, which was recently burned.

The Farmers' Elevator Co. of Pierson, Iowa, capitalized at \$25,000, has been granted a charter.

J. C. Watson of Inwood, Iowa, has bought an elevator at Meriden, Iowa, and will remove to that place.

A co-operative elevator company may be formed at Summerset, Iowa, to buy and operate the local elevator.

There is talk of organizing a farmers' elevator company at Rake, Iowa, to erect a co-operative elevator.

The Farmers' Co-operative Society of Dumont, Iowa, has purchased W. W. Ahrens' elevator at that place.

An attempt to organize a co-operative elevator company at Altoona, Iowa, has not met with much success as yet.

It is announced that F. J. Taylor of Emerson, Iowa, will engage in the grain and fuel business at Hastings, Iowa.

C. E. Stephenson & Co. have succeeded Walker & Jacobshagen in the ownership of the mill and elevator at Mediapolis, Iowa.

The Younglove & Boggess Co. of Mason City, Iowa, has the contract to erect a 30,000-bushel elevator at Oto, Iowa, for the Western Elevator Co.

D. Hunter & Co. of Hamburg, Iowa, have let the contract for building a 10,000-bushel elevator to the Younglove & Boggess Co. of Mason City, Iowa.

The Farmers' Co-operative Society, which was organized some time ago at Palmer, Iowa, and has been doing a scoop-shoveling business, is planning to build an elevator and handle coal and lumber.

A co-operative company has been organized at Fostoria, Iowa, to carry on a grain business under the style of the Farmers' Elevator Co. It will have a capital stock of \$25,000, divided into shares of \$25 each.

The Stuhr & Reesey Grain Co. has filed articles of incorporation at Minden, Iowa. The capital stock is \$10,000, of which \$5,000 is paid, and the incorporators are: John W. Reesey, J. H. C. Stuhr and William Stuhr.

The Des Moines Elevator Co. of Des Moines, Iowa, has completed an extensive feed mill near its elevator in that city. The mill building is 60x40 feet in size and four stories high, of frame construction. It is equipped with modern machin-

ery and has a capacity of about 400 tons a day. All kinds of ground feed will be manufactured for shipment to the Eastern market.

Joseph Auracher of Shenandoah, Iowa, is making a number of improvements to his elevator at Bingham, Iowa. Part of the old building is being torn down and will be rebuilt, the capacity being materially increased. A new gasoline engine and some new cleaning machinery will be installed.

The Rolfe Grain Co. is building a grain drier adjoining its elevator at Rolfe, Iowa, and will make a specialty of handling new corn. The building containing the drying machinery will be about twenty-five feet high, of brick construction, and will cost, including equipment, about \$3,000.

MISSOURI, KANSAS AND NEBRASKA.

An elevator is said to be wanted at Spring Hill, Kan.

A new elevator is reported projected at Beatrice, Neb.

The Hunter Milling Co.'s new elevator at Wellington, Kan., is completed.

Ernst Bros. have engaged in the grain and feed business in Humboldt, Kan.

The new Roberts Elevator at Hooper, Neb., is reported ready for business.

The Peavey Elevator Co. is erecting a new double corn crib at Bloomfield, Neb.

Baker & Edmonds are reported to have sold their grain business at Lorraine, Kan.

J. C. Twamley & Son are building an addition to their elevator at Omaha, Neb.

Efforts are being made to organize a farmers' elevator company at Pender, Neb.

A. T. Rodgers has been making some improvements to his elevator at Beloit, Kan.

Frank Faulkner is reported to have leased his elevator at Edholm, Neb., to Dan Dawson.

Hartsman & Frerking have succeeded R. C. Frerking in the grain-business at Alma, Mo.

The Duff Grain Co. of Nebraska City, Neb., is building a 10,000-bushel elevator at Oread, Neb.

The Farmers' Co-operative Grain and Live Stock Co. of Lewis, Kan., will install a feed mill in its elevator.

The Farmers' Elevator Co. of Syracuse, Neb., has its new 40,000-bushel elevator nearly ready for operation.

The Solomon Valley Mill Co. of Osborne, Kan., has taken over the Smither Grain Co.'s business at Woodston, Kan.

J. W. Townsend of Keokuk, Iowa, has bought Wilsey Bros.' elevator at Wayland, Mo., taking possession December 1.

Efforts are being made to organize a co-operative elevator company at Adams, Neb., composed of farmers and business men.

The Farmers' Elevator Co. of Wilber, Neb., is reported to have purchased D. R. Hopkins' elevator at that place for \$8,000.

An independent elevator company, composed of local farmers, is being formed at Pickrell, Neb., to build a co-operative elevator.

The Jones Grain Co. has completed its new elevator at Mynard, Neb. It cost \$4,000 and replaces the one burned several months ago.

The Moses Bros. Mill and Elevator Co. has about completed its new office building at Great Bend, Kan. It is being built of concrete blocks.

The foundation for the Blue Springs Farmers' Elevator Co.'s new house at Blue Springs, Neb., is in and work on the superstructure is in progress.

It is announced that a stock company is being formed at Tebbetts, Mo., to take over Marlow & Wythe's mill and erect a 50,000-bushel grain elevator.

E. W. Closson & Co. of Sholes, Neb., have just completed a 30,000-bushel grain elevator at that place. Lund, Rud & Co. of Minneapolis, Minn., had the contract.

A charter has been granted to the A. L. Harroun Grain Co. of Kansas City, Mo., capitalized at \$10,000. The incorporators are: A. L., Edna, G. H. and Mrs. G. H. Harroun.

The elevator at Craig, Neb., owned by the New Richmond Roller Mills Co. of New Richmond, Wis., has been purchased by G. A. Blackstone and T. A. Minier, who will operate it.

The Farmers' Elevator Co. of Clifton, Kan., has completed its new elevator and placed Stephen Douglas in charge as manager. The elevator has one dump and is operated by a 6-horsepower gasoline engine.

The Ewart-Wilkinson Grain Co. is building an addition, 24x24 feet and 28 feet high, to its elevator at Wahoo, Neb. The addition has a stone foundation and will contain four bins with a storage capacity of 12,000 bushels. The old portion of the

elevator is being overhauled and repaired. M. O. Worrall is the local agent.

The Evans Grain Co., capitalized at \$50,000, has been chartered at Lincoln, Neb. John T. Evans, Reginald H. Thorp, William E. Evans and E. J. Brown are the incorporators.

It is reported that W. H. Ferguson of Hastings, Neb., will build a 30,000-bushel cleaning and storage elevator at McCook, Neb. It will be operated by a 25-horsepower gasoline engine.

The Gaugh Grain and Coal Co. has been incorporated at Kansas City, Mo., with a capital of \$17,000. Thomas T. and W. Mars Gaugh and Emery B. Bruce are the incorporators.

It is stated that the Merriam & Holmquist Co., which owns and operates a large elevator at Omaha, Neb., may build a new one with a capacity of about 200,000 bushels next year.

Branches of the National Farmers' Exchange have been organized, or are in process of organization, at Bee, Hartington, Goehner and Falls City, Neb., to build co-operative elevators.

A syndicate, headed by John T. Stewart, has purchased the Aetna Flour Mills at Wellington, Kan., and a string of eighteen elevators from Kramer Bros. The houses are located in Sumner and adjoining counties in Kansas and in Kay and Grant counties in Oklahoma.

The Goodell Grain and Coal Co. has been incorporated at Crete, Neb., with a capital stock of \$12,000, all paid. The incorporators are: C. B. Anderson, M. M. Anderson, C. B. Goodell and E. T. Goodell. The company has purchased J. Buck's grain elevator and fuel business at Crete.

The Loomis Grain and Milling Co. of Loomis, Neb., has been granted a charter. The capital stock is \$50,000, of which \$25,000 is paid up, and the incorporators are: J. W. Jackson, T. W. Kiplinger, J. W. Morrison and L. K. Doherty. An addition to the company's elevator is being built and a new flour warehouse will be erected.

William Burke, formerly secretary of the Harroun Elevator Co., is reported to be organizing a new company with a capital of \$15,000 to operate the Elwood Elevator at Elwood, Kan., and to carry on a general business of buying and selling, receiving and shipping grain, with headquarters at St. Joseph, Mo. The new company is to be known as the Burke Grain Co., and will, it is stated, occupy the suite of offices in the St. Joseph Board of Trade Building formerly occupied by the Harroun Co.

The 185-foot tower of the new Rock Island Elevator at Armourdale (Kansas City), Kan., is completed, and work on the main portion of the elevator is being pushed as rapidly as possible. It is expected that it will be completed by next June. The new house is being built of concrete, brick and steel and will have a storage capacity of approximately 1,000,000 bushels. The tower is of brick and rests on a concrete foundation. It is 21 feet 6 inches in diameter at the bottom and 9 feet 6 inches at the extreme top. The elevator will be operated by the J. Rosenbaum Grain Co.

The new elevator of the Nebraska-Iowa Grain Co. at Gibson Station, Omaha, Neb., was formally put in operation on December 3 in the presence of a large delegation from the Omaha Grain Exchange. The elevator is a metal-clad structure, 130 feet high, and rests on a solid concrete foundation. It has a capacity of 100,000 bushels and is equipped with modern cleaning and handling machinery operated by electrical power. The building and equipment cost about \$35,000. It was built by the Younglove & Boggess Co. of Mason City, Iowa. The grain company has secured the necessary trackage and grounds to increase the capacity of the elevator to 1,000,000 bushels if desired. It is probable that storage tanks of 100,000 bushels' capacity will be added when occasion demands.

The Missouri Grain Co. of Des Moines, Iowa, has increased its capital stock to \$108,000, fully paid up, to provide funds for the erection of a new cleaning and transfer elevator at Kansas City, Mo., to be operated in conjunction with the company's elevator at Moberly, Mo., and line houses on the Wabash between Des Moines and Moberly and through Northern Missouri on the Kansas City division of the Wabash. It will be located on the Wabash tracks in Kansas City, and will have a handling capacity of 150,000 bushels. For the present there will be no storage facilities, though in the course of a year it is the intention of the company to erect large storage tanks adjoining the elevator, which will be used very largely in the handling of its own line house business. The decision of this company to erect and maintain a plant at Kansas City is practically the first move of its kind to be made by Iowa grain interests looking to providing facilities for handling a large business through Kansas City to the gulf ports. Heretofore the Iowa dealers have depended largely on outlets to the Atlantic seaboard. The building of this plant by interests that are identical with

the Des Moines Elevator Co. and large line house concerns in the state is an indication of a tendency for grain shipments from this section to seek an outlet by the gulf ports.

The recently chartered Independent Elevator Co. of Omaha, Neb., has elected the following officers: G. W. Wattles, president; Guy C. Barton, vice-president; A. L. Reed, secretary, and Frank Murphy, treasurer. These, with E. E. Bruce and F. P. Kirkendall, constitute the board of directors. The company has purchased a site from the Omaha Grain Terminal Co. at Sheeley Station on which to build the elevator, paying \$15,000 for the same. The contract for the elevator has been awarded to the Minneapolis Steel and Machinery Co. of Minneapolis, Minn. Work will be commenced at once and the elevator is to be completed by July 1, 1905. The plant will consist of a working house with five circular steel storage tanks on each side. The ten tanks will each have a capacity of 100,000 bushels. This will give a storage capacity of 1,000,000 bushels. Enough land is reserved adjoining the elevator for the erection of ten additional tanks later if desired. A large power house will be erected to supply power for operating the machinery. The working house, tanks and power house will occupy about five acres of ground and about five acres additional will be utilized for trackage facilities. The entire plant, including equipment and site, will cost about \$300,000. The Omaha City Council has passed an ordinance vacating certain streets crossing the Omaha Grain Terminal Co.'s property, making it possible to lay tracks where desired for the new elevator.

THE DAKOTAS.

Two of the elevators at Lake Andes, S. D., are closed.

The elevator at Glover, N. D., is closed for the season.

O. A. Olson is doing a track-buying business at Glover, N. D.

The new De Laney Elevator at White Earth, N. D., is completed.

A 50,000-bushel independent elevator has been completed at Doyon, N. D.

A farmers' company is being organized at Platte, S. D., to build an elevator.

The old mill at St. Thomas, N. D., has been converted into an elevator.

The three new elevators at Colton, S. D., are completed and in operation.

The Acme Grain Co. has completed a 25,000-bushel elevator at Maddock, N. D.

James McCabe of West Hope, N. D., has completed a new elevator at Strabane.

H. C. Webb has completed his new elevator at Deering, N. D., and is now building a feed mill.

Fred Stunkel and Charles Hanson are now operating the Cargill Elevator at Grafton, N. D.

Magnus Anderson, formerly of Mayville, N. D., is building an independent grain elevator at McHenry, N. D.

On account of the car shortage the elevators at Bisbee, N. D., have been unable to handle all the grain brought there.

Flat houses have been put up at Hannah, N. D., to take care of the surplus grain the elevators are unable to handle.

Over 400 cars of grain are reported to have been shipped out by the elevators at Anamoose, N. D., so far this season.

Three elevators have been erected in the new town of Lauda, N. D., on the Great Northern between Bottineau and Souris, N. D.

The Fredonia Elevator Co. has completed an elevator at Gackle, N. D., a new town on the "Soo" about seven miles from Kulm, N. D.

The elevators at Harvey and Balfour, N. D., are reported filled to their capacity and few cars obtainable for shipping out any of the grain.

The Northwestern Elevator Co. has completed a new elevator at Willow Lakes, S. D., to replace the one wrecked by a cyclone some time ago.

The Farmers' Mill and Grain Co. of Milnor, N. D., has installed an electrical plant for lighting its mill, elevator, warehouse and power plant.

The deal for the sale of the thirteen elevators in South Dakota, located at points north and west of Madison, that state, by the S. Y. Hyde Elevator Co. of La Crosse, Wis., has been closed. The consideration is about \$70,000. The grain firm of Stoddard & Ketcham of Madison, S. D., secured six of the elevators, located at the following stations: Oldham, Erwin, Bryant, Elrod, Vienna and Naples. The other seven, located at Ramona, Winfred, Howard, Vilas, Artesian, Woonsocket and Westington Springs, were purchased by Larkin & Thompson, millers and grain dealers of Madison, S. D. The S. Y. Hyde Elevator Co. still owns fifty-five elevators at various points in the West. The thir-

teen elevators were sold on account of their being outside the territory which the company desires to work.

The Sherman Farmers' Elevator Co. of Sherman, S. D., has completed a 40,000-bushel elevator. I. W. Beach will have charge as manager and buyer.

L. Buege & Co., grain elevator builders of Minneapolis, Minn., have the contract for a 10,000-bushel elevator for F. D. Morrison at Mission Hill, S. D.

Doyle & Fischer have sold their elevator at Wisheka, N. D., to August W. Herr. The new owner has taken possession and will operate the elevator.

J. J. Decker of Menno, S. D., has purchased Dewald & Walter's elevator at Freeman, S. D., and installed a gasoline engine and made other improvements.

Application for an elevator site on the North-Western right-of-way at Bonesteel, S. D., has been made to the South Dakota State Board of Railroad Commissioners by John H. Schroeder of Armour, S. D.

C. W. Thompson, a grain dealer of Parker, S. D., is erecting a large elevator on the C. & N. W. right-of-way at Centerville, S. D. A. J. Anderson will have charge of the elevator when it is completed.

The Farmers' Co-operative Elevator Co. of Wakonda, S. D., has filed an application with the state board of railroad commissioners for an elevator site on the right-of-way of the Milwaukee road at that place.

H. Gallagher is putting in a feed mill, to be operated in connection with his grain business at Flaxton, N. D. The feed mill machinery will be located in a separate building and will be operated by a gasoline engine.

Torrence Bros. & Co. of Tabor, S. D., have made arrangements for the erection of a grain elevator at Fairfax, S. D. It will have a capacity of between 15,000 and 20,000 bushels and will be located on the C. & N. W. right-of-way. George A. Torrence will have charge of the Fairfax end of the business.

OHIO, INDIANA AND MICHIGAN.

I. A. Adams has built a flour room in his elevator at Bunker Hill, Ind.

Clyde Holliday succeeds Harry Holfolk in the grain trade at Upland, Ind.

William H. Meacham will, it is stated, erect a grain elevator at Holly, Mich.

W. H. Guthrie succeeds Guthrie & West in the grain business at Marengo, Ohio.

Fisk & Gwin have succeeded H. G. Fisk in the grain business at Union City, Mich.

The new elevator at Rob Roy, Ind., is completed and in operation. W. H. Clawson has charge as manager.

The Mead Grain Co. of Union City, Ind., has remodeled its office and made other improvements to its property.

The Ireton Bros. & Eikenberry Co., grain dealers, at Delphos, Ohio, have completed a new office near their elevator.

About thirty-five people are now employed in the bean department of the Elkton Grain Co.'s plant at Elkton, Mich.

At Sterling, Mich., the local business men's association is trying to secure the erection of a grain elevator. A bonus will be given.

The Fowler Grain Co. expects to have its new 95,000-bushel elevator at Fowler, Ind., completed by February 1. The building will be 93 feet high.

L. C. Allinger has withdrawn from the milling and grain firm of G. E. Allinger & Son at Jackson Center, Ohio, and will engage in the grain business elsewhere.

Cruikshank & Babcock, hay and grain dealers, have agreed to build and operate grain elevators in Cardington, Ohio, in consideration of a bonus of \$1,000. The money was raised by subscription.

Mitchell & Hague have sold their elevator and grain business at Wilmington, Ohio, to George and Park Buckley, grain men of Kingman, Ohio. The new owners will remove to Wilmington and continue the business.

The Crites Mill Co. of Circleville, Ohio, has leased the elevator at Hayesville, Ohio, taking possession December 1. This gives the company elevators at four of the best grain points in the Scioto Valley between Columbus and Chillicothe, Ohio.

J. A. Neal will re-engage in the grain and seed business at Peru, Ind. He has regained control of the Wabash Elevator in that city and will operate it under the firm name of J. A. Neal & Co. Mr. Neal is now in California, where he will remain during the winter, but the business will be carried on during his absence by L. H. Myers and Miss Anna

Keyes, who have been in his employ for a number of years.

The Burrell Engineering and Construction Co. of Chicago, Ill., has prepared plans and has the general contract for the erection of an elevator and warehouse at Cincinnati, Ohio, for Henry Heile & Sons. It will be 52x70 feet, of crib and mill construction, and cost \$20,000.

EASTERN.

An addition is being built to Herbert Jeffs' grain store at Jefferson, Mass.

Clarence Cowles has engaged in the grain and feed business at Plantsville, Conn.

Charles J. Greenough, a feed dealer of Saranac Lake, N. Y., is erecting a grain elevator in that city.

D. W. Bragdon has about completed his new grain store at North Berwick, Me. It is 24x72 feet in size, metal clad.

Ambler Bros. of Poughkeepsie, N. Y., have purchased William Quaid's grain and feed business at Newburgh, N. Y.

Van Zandt & Voorhees are preparing plans for the erection of a large grain elevator at Plainfield, N. J. Work on the structure will be commenced about January 1.

The Livingston Grain Co. of Lowell, Mass., is now operating the machinery in its grain elevator and grist mill by electrical power, having changed from steam power.

A building permit has been issued at Providence, R. I., for the erection of a one-story brick and frame addition to the Narragansett Milling Co.'s plant, to be used as a grain store.

Martin L. Strayer has withdrawn from the firm of Strayer Bros. & Co., dealers in grain, flour, feed and fuel at York, Pa., and the business will be continued by the other partners, Henry L. and John C. Strayer and Thomas C. Wigginton.

The Portland Elevator Co. and the New England Elevator Co., both of Portland, Me., subsidiary companies of the Grand Trunk Railway, have elected the following officers: President, C. M. Hays; vice-president, F. W. Morse; treasurer, F. Scott.

George W. Walker of Edenville, Pa., has leased the Western Maryland Elevator at Chambersburg, Pa., succeeding John L. Reside in the grain business. Mr. Walker will remove to Chambersburg in the spring and Mr. Reside will go on his farm, near Fayetteville, Pa.

Arthur Copeland is erecting a grain elevator at Brockton, Mass., to carry on his grain business. The building will be about 30x182 feet in size of frame construction, metal clad. The elevator portion will be three stories high. The remainder of the structure will be two stories high and will be used as a grain store.

Arthur H. Proctor and Frederic W. Clapp, who have been carrying on a wholesale and retail grain, hay and feed business at East Cambridge, Mass., under the firm name of Proctor & Clapp, have dissolved partnership by mutual consent. Mr. Proctor will continue the business under the style of Arthur H. Proctor & Co.

The grain store at East Bridgewater, Mass., belonging to the Joshua Dean Estate, was entered by burglars at an early hour on the morning of November 13. The safe was blown open with dynamite and rifled of its contents. The interior of the office and the front of the building was wrecked by the force of the explosion.

John A. Barri, proprietor of the grain, feed and fuel business at Bridgeport, Conn., conducted under the style of the Berkshire Mills, has purchased a tract of ground in that city and will erect a large grain elevator. The business has outgrown its present quarters and more room was necessary. Work on the new building will be commenced at once.

The firm of Koch, Bush & Co., Reading, Pa., has been incorporated, with a capital of \$100,000, divided into 1,000 shares of \$100 each, to continue the wholesale and retail grain, flour, feed and fuel business heretofore conducted as a partnership. The incorporators are: Sarah Koch, James K. Bush and William H. Bush, who each hold 170 shares of the capital stock. They also constitute the board of directors. A large storage warehouse will be erected.

A recent report from Philadelphia, Pa., says: "With the improvement in the grain trade in this city it is highly probable that the Girard Point elevators of the Pennsylvania Railroad, which were put out of service some months ago, will resume operations in a very short time. With the falling off of the grain trade to this city, due largely to the strike on the Great Lakes, these elevators, with a combined capacity of 2,000,000 bushels, were closed down, and the grain coming to this city over the Pennsylvania lines was handled at the Washington Avenue elevator. Of late the movement

of grain has so increased as to tax the capacity of the Washington Avenue elevator, and the officials of the company have been considering the question of reopening the Girard Point elevators. During the shutdown they have been put into thorough repair."

The flour, feed and grain business at Saratoga Springs, N. Y., conducted under the firm name of D. Gibbs & Son, has been purchased by James H. Jones, who has been engaged in the same line of business at that place. The new owner took possession on November 21 and will continue the business. The transfer of the Gibbs interests includes the grain store, elevator and storage warehouse. The Gibbs business was established in 1865 by D. Gibbs and his son, William H. Gibbs. After the death of the former his son continued the enterprise under the old name until he sold out to Mr. Jones.

Plans have been prepared and the contract awarded for the erection of the New York Central & Hudson River Railroad Co.'s new grain elevator on the West Shore Railway, at Weehawken, N. J. It will be erected at Pier 7 and will cost \$923,843. The elevator will be 354 feet long and 101 feet wide, and will have a capacity of 2,000,000 bushels. The building is to be ready for use in eleven months from the date on which the contract was awarded, and a penalty of \$100 per day is provided for every day after that period which may be required for its completion. A bonus of the same amount will be given for each day less than the specified time in which the work is completed.

The milling firm of Farwell & Rhines at Watertown, N. Y., will shortly begin the construction of a 75,000-bushel grain elevator near their milling plant in that city. A lot has been purchased on which to build the elevator. The new house will be used for the storage of grain for supplying the firm's mills. The two mills have storage room for 20,000 bushels, but this has proven inadequate to the needs of the business. The elevator will be either a steel tank or a metal-clad wooden structure, probably the latter, and will be equipped with a receiving separator, power shovel and grain-cleaning machinery. The motive power is at present undecided between electricity and gasoline, though the gasoline engine is most favored by the firm. A sidetrack will be put in by the New York Central, making it possible to unload cars at the elevator.

CANADIAN.

The new Farmers' Elevator at Kitley, Assa., is completed.

A feed store has been opened at Innisfail, Alberta, by Benton & Son.

E. Lariviere succeeds J. S. Legault in the flour business at Montreal, Que.

The Dowd Milling Co.'s new elevator at Pakenham, Ont., is about completed.

Gamble & Yeo have engaged in the flour and feed business at Moose Jaw, Assa.

The Ogilvie Flour Mills Co., Ltd., will build an elevator at Cartwright, Man., next year.

The assets of the Victoriaville Flour and Grain Co. of Victoriaville, Que., have been sold.

The Colonial Elevator Co. of Winnipeg will build a grain elevator on the "Soo" at Lang, Man.

The Lucknow Elevator Co. of Lucknow, Ont., will increase its capital stock from \$2,000 to \$4,000.

The Canadian Elevator Co. has built an addition to its flour and feed warehouse at Winnipeg, Man.

W. S. Whiting of West Lorne, Ont., has purchased William Weldon's flour and feed store at St. Thomas, Ont.

The Enderby Flouring Mills Co.'s new 30,000-bushel elevator at Lethbridge, Alberta, is about ready for business.

The Alberta Grain Co. will build an elevator at Ponoka, Alberta, and Blain & McKelvie will erect a grain warehouse.

The Northern Elevator Co. of Winnipeg, Man., has purchased a site in the Canadian Northern Railway Co.'s yards at Fort Rouge, Man., and will erect an elevator.

The Royal Grain Co., Ltd., has been chartered at Winnipeg, Man. The capital stock is \$50,000 and the incorporators are Samuel W. Henderson, James Henderson, George H. Monkhouse, William A. Sweetman and Frank H. Phippen.

This year's wheat crop in Manitoba and the Northwest Territories is now estimated by the Ogilvie Flour Mills Co., Ltd., at from 63,000,000 to 65,000,000 bushels. It is said that only a little over one-third of this crop has been marketed by the farmers.

The Maple Leaf Flour Mills Co., Ltd., has been incorporated at Ottawa, Ont., to carry on a general grain and milling business, operate mills, elevators, warehouses, etc. The capital stock is \$1,000,000. The incorporators are: Douglas C. Cameron of Winnipeg, Man.; Angus Carmichael of Rat

Portage; John Alexander Cameron of Dominionville; John Dundas Flavell of Lindsay, Ont., and Hamilton S. Dowd of Quyon, Que.

The Andrews-Gage Grain Co. of Winnipeg, Man., has completed four new elevators on the Arcola branch of the Canadian Pacific Railway.

Ground has been broken at St. Boniface, Man., for the new terminal elevator to be erected by the Colonial Elevator Co. and the Andrews-Gage Grain Co. Only the working house, with a capacity of 50,000 bushels, will be completed this season. Later on a system of tanks will be added.

A dispatch from Fort William, Ont., under date of November 21, states that the Canadian Pacific Railway Co. will build a new 2,000,000-bushel elevator at that place. Construction work will be commenced in the spring and the elevator is expected to be completed in time to assist in handling next year's crop.

The Brackman-Ker Milling Co., Ltd., has purchased a lot adjoining its flour mill at New Westminster, B. C., and will erect a new grain elevator of large capacity and equip it with modern grain handling facilities. There is already railway connection with this property by means of a side-track. In addition the company has secured two lots on the water front opposite the mill, and proposes to build a wharf, with the storage accommodation necessary to handle the large traffic from Fraser River points. This wharf adjoins two railways, the Canadian Pacific and the Great Northern. The plans have been under consideration for some time by the local manager, W. J. Mathers. In addition to the improvements at New Westminster, the company has completed a new warehouse, 60x400 feet in size, at Vancouver, B. C., and will install a full line of grain cleaning machinery. Some new machinery has also been installed in the plant at Victoria, B. C.

MINNESOTA AND WISCONSIN.

The elevator at Cheney, Minn., is closed.

A new elevator is about completed at Halma, Minn.

A farmers' elevator is to be built at Zumbrota, Minn.

The new elevator at Lincoln, Minn., is completed.

The New London Milling Co. has completed its elevator at Milaca, Minn.

It is reported that a farmers' elevator will be erected at Pelican Rapids, Minn.

Charles Frank will operate the old Hogan Elevator at New Paynesville, Minn.

S. C. Johnson has completed his new elevator and feed mill at Crookston, Minn.

A farmers' elevator company has been organized at Boyd Minn., to buy or build an elevator.

The Lamberton (Minn.) Commercial Club is promoting a farmers' elevator project for that place.

The Inter-State Grain Co. has completed a 20,000-bushel addition to its elevator at Holloway, Minn.

An elevator is being built at the new town site on the Great Northern between Granite Falls and Maynard, Minn.

A new elevator is being built at Milroy, Minn., by Leonard Nelson of that place and Charles Nelson of Tracy, Minn.

Farmers in the vicinity of Lanesboro, Minn., are reported to contemplate buying the Wykoff Elevator at that place.

A Chicago grain company is said to be negotiating for a site in Oshkosh, Wis., with a view of erecting an elevator.

Stock is being subscribed by farmers around Wanamingo, Minn., for the erection of a co-operative elevator at that place.

The first car of grain ever shipped from Richville, Minn., was sent out on November 15. It was shipped by the Prairie Elevator Co.

The Benson and St. John Grain companies have completed their new elevators at Heron Lake, Minn., which replace those burned on October 8.

A charter has been granted to the Springfield Farmers' Elevator Co. of Springfield, Minn. The capital stock is \$25,000, divided into 1,000 shares of \$25 each.

Sylvester Stewart, proprietor of the Morris City Mills at Morris, Minn., is reported to have leased the Farmers' Elevator at Chokio, Minn., and taken possession.

A Duluth, Minn., firm has built a grain elevator at the siding between Hallock and Kennedy, Minn. A coal shed and flour warehouse are also being erected. The place will be known as Chatham.

Olaf Holstrom, a wheat buyer at Parkers Prairie, Minn., who was charged with embezzling \$500 belonging to the company by which he was employed, plead guilty to the charge in the district

court at Fergus Falls, Minn., and was sentenced to three years in the Stillwater penitentiary.

The Farmers' Grain Association's elevator at Underwood, Minn., has been opened for business with Theo. Sjor Dahl as buyer.

The Hubbard Milling Co. of Mankato, Minn., has taken over the old Weirwill mill and elevator property at Le Sueur, Minn. The elevator will be operated with Edward Weirwill as manager.

Lund, Rud & Co. of Minneapolis, Minn., have completed a 15,000-bushel grain elevator at Judge, Minn., for the Thomas Hanson Co. of Minneapolis. Matt Judge of Rochester, Minn., is in charge as buyer.

The Walter Bowman Elevator Co. of Mankato, Minn., will build a new 20,000-bushel elevator at that place. It will be located on the Omaha right-of-way and will be modern in construction and equipment.

The Sheffield-King Elevator at Jordan, Minn., has been closed. The buyer, C. A. Nachbar, who had charge of the house for about a year and a half, will buy wheat at the old Nicolin Elevator in that town.

The Northern Grain Co. of Chicago has arranged to extend its business in the Northwest by taking a long lease of the Great Northern Elevator at Minneapolis, this house having a capacity of 2,000,000 bushels.

Three grain elevators, ranging in capacity from 30,000 to 50,000 bushels each, are now in course of construction at Greenbush, Minn. The companies building the houses are the Red Lake Falls (Minn.) Milling Co.; the Thief River Falls (Minn.) Milling Co., and the Northern Elevator Co.

Milwaukee, Wis., grain dealers are to erect a large steel elevator in that city. There are several steel elevators now in use there, but they are owned by private concerns, the brewers and maltsters, and the proposed new one will be the first for general storage of grain. The plans for the elevator, which will practically take the place of Elevator C, destroyed by fire some weeks ago, are now being prepared. A syndicate of grain dealers headed by the Berger-Crittenden Milling Co. and W. D. Sawyer is back of the project. The intention is to erect, upon the steel tank system, an elevator that will have a capacity of 700,000 or 800,000 bushels at the start and which can easily be increased in capacity as required, by erecting additional tanks. The first plant will be one of twelve or fifteen tanks and will cost between \$350,000 and \$400,000. The parties interested are said to have practically settled upon a site in the Muskego Avenue yards of the Milwaukee road, just west of the present Elevator B, where "end" room is to be had and where track connections can be made.

SOUTHERN AND SOUTHWESTERN.

The erection of an elevator at Newbern, Tenn., is being agitated by local business men.

The Watonga Mill and Elevator Co. succeeds the Watonga Milling Company at Watonga, Okla.

R. H. Worke has succeeded the firm of Green & Worke in the hay and grain business at Nashville, Tenn.

The Sanger Mill and Elevator Co. of Sanger, Texas, is reported to be erecting a new metal-clad grain elevator, at a cost of \$12,000.

H. K. Holman, a grain and cotton dealer at Fayetteville, Tenn., has installed some new machinery, including a corn sheller, in his plant at that place.

It is announced that the Planters' Compress and Elevator Co. of Greenville, Texas, will erect an elevator and warehouses, to cost between \$15,000 and \$20,000.

The Daniel Grain Co. has been chartered at Little Rock, Ark. Dan Daniel is president and treasurer; D. B. Samuel, vice-president, and B. J. Daniel, secretary.

The Farmers' Union Grain and Fuel Co. has been incorporated at Altus, Okla., with a capital of \$5,000. G. R. Thrush, J. L. Meeks and J. T. Parks are the incorporators.

The Werkheiser-Polk Mill and Elevator Co. of Temple, Texas, has changed its corporate name to Werkheiser-Polk Mill Co. and increased its capital stock to \$100,000. The following officers were recently elected: W. E. Werkheiser, president; R. L. Polk, vice-president, and C. A. Hughes, secretary-treasurer. The company will erect two additional steel storage tanks with a capacity of 50,000 bushels each.

The Burrus Mill and Elevator Co. has been incorporated at Fort Worth, Texas, with a capital of \$199,900. The following are the incorporators: J. Perry Burrus, J. M. Shane, J. S. Heard, S. D. Heard, W. P. Newsome, J. L. White, W. C. Burrus, L. A. Scott, E. W. Kirkpatrick, J. P. Crouch, all of McKinney, Texas, and E. W. Morton, Jr., of Dallas, Texas. The company will do a general

grain and milling business and will erect a 1,000-barrel mill at Fort Worth.

The Harris-Scotten Co., lessee of Elevator B at Galveston, Texas, is reported to be putting in a Hess Grain Drier, to be used in preparing corn for export. The building containing the drying apparatus will be about 50 feet high and 25 feet square. It adjoins Elevator B and will be capable of handling about 5,000 bushels a day.

WESTERN.

A feed store has been started at Oregon City, Ore., by G. A. Heinz.

A. B. Buckles is reported to have engaged in the feed business in Oregon City, Ore.

Veatch & Hayes are reported to have sold their feed business at Grants Pass, Ore., to H. N. Parker.

O. M. Collins, head of the local bank at Mohler, Idaho, has purchased the controlling interest in the Mohler Milling and Warehouse Co.

The four grain warehouses at Washtunna, Wash., are estimated to have received about 673,980 bushels of wheat this year. The average price paid was 73 cents a bushel. Over 197,000 bushels have been shipped from that point so far this season.

A dispatch from Portland, Ore., dated December 1, has the following concerning grain and flour shipments from that port: "Six grain cargoes were cleared from this port in the month just closed, five of them for Europe and one for South Africa. Of the total of 655,339 bushels of wheat shipped from here, 465,519 bushels went to Europe. California received 182,351 bushels last month, and since the season opened nearly 1,000,000 bushels. Flour exports in November were 42,043 barrels to the Orient and 15,179 barrels went to San Francisco. An examination of the shipments from Portland and Puget Sound ports, since the opening of the cereal year shows that the water movement was nearly equal to that of last season, and compares well with the shipments of the past seven years, and this notwithstanding the great quantity of wheat sent by rail to the Eastern states."

Elevators may replace some of the present warehouses along the railroads in the wheat districts of the Inland Empire. This year, for the first time in the history of the Pacific Coast states, a large part of the wheat crop of Washington and Oregon has found its outlet by rail to the East. Some wheat has been shipped East by rail before, but the greater part of the crop heretofore has been exported, aside from what was used by the local mills. For that reason warehouses have always been largely used. The grain is brought to them in sacks and is shipped out that way. Very few elevators for handling bulk grain have ever been built in this country. Men who are in a position to know figure that the heavy grain movement East by rail this year will continue to grow and that the erection of elevators will be a necessity. The demand for Pacific Coast wheat by millers in other sections of the United States this year will no doubt result in a greatly increased acreage next year. Then, too, local millers have ground more than the usual amount of Inland Empire wheat this year, as shown by the heavy shipments of flour to other parts of the country.

CONSUMERS WHO LIE.

The "eminently respectable" class of consumers who misrepresent the attitude of competing dealers as regards prices have done more to demoralize the coal business than any other one thing. This method of attempting to influence lower prices is not only dishonest, but, in fact, contemptible. Men who profess great moral virtue and rectitude in other matters, for some reason have no hesitancy in telling just a "little lie" in the hope that they may save a few paltry cents on a ton of coal, and we regret to say that even an occasional minister of the gospel is not above stooping to these misrepresentations. We have heard this question discussed often by men of experience, and we are thoroughly convinced that, no matter from what source it comes, a dealer should first substantiate a prospective customer's statements, especially a new one, when he says that Jones has offered him his coal at a reduction below the current market price.

If you as a dealer were on better terms with your competitors, such matters would not so easily come up to worry you, for when a consumer, whether minister, deacon or banker, informed you that Jones had quoted him a price concession, but that he would rather buy it from you at the same price, you would, instead of flying off the handle, merely telephone Jones to verify the matter. If Jones denies it you are then in a position to ask the prospective customer for an explanation. If he admits it, then it becomes Jones' turn to explain, and when all other means have failed there will still be plenty of time to cut prices.—Arthur M. Hull, editor Retail Coalman, in Trade Price List.

COMMISSION

The Chicago Savings Bank has been made a depository for margins.

J. B. Fleshman & Co., grain, cotton and stock brokers of Philadelphia, are reported to have suspended.

It is announced that Chas. Renike has withdrawn from the New Orleans grain firm of A. F. Leonhardt & Co.

James Black has joined the Winnipeg grain firm of Bruce McBean & Co. He was formerly with the Ogilvie Milling Co., Ltd.

W. E. McQuiston, who has been with Logan-Bryan, Chicago, as wheat trader, has resigned to go into business on his own account.

The firm of M. Straus & Co., with R. W. Hamill as special partner, has been organized to do a grain shipping and export business at Chicago.

Amended articles of incorporation have been filed by the Nebraska Grain Association, Omaha, changing the name to the G. C. Thompson Company.

Sidney C. Love has opened a branch office in Minneapolis, with a leased wire to the Chicago market, under the management of R. S. Stevens.

The membership of D. J. Sully, the cotton manipulator, who joined the Chicago Board of Trade shortly before his failure, has been posted for transfer.

Daniel J. Murphy, a member of the Chicago Board of Trade, who recently underwent an operation for appendicitis, has gone to the South to regain his health.

President Jackson of the Chicago Board of Trade has recovered from the recent severe illness which threatened his life. He has been on 'Change, but has not resumed active business duties.

Charles Jernegan has resigned his membership on the Chicago Board of Trade to take the presidency and management of a California corporation. He became a member of the Board twenty-five years ago.

The contents of Daniel J. Sully's office in the Wall Street Exchange Bldg., New York, were sold at auction recently by order of the trustee in bankruptcy. The appraised value was \$4,600, but the property brought \$7,900.

The plan of Dr. William E. Woodend of New York to effect a settlement with his creditors by giving them stock in a new corporation which he has organized has been turned down by the court. Woodend, however, announces his intention of evolving another plan to resume business.

Wm. Burke, formerly secretary of the Harroun Elevator Co. of St. Joseph, Mo., has resumed business in that city and expects to incorporate the Burke Grain Co., with a capital of \$10,000 or \$15,000. It is announced T. J. Berry, John C. Neer and others who were connected with the Harroun company will continue with the new house. Arrangements have been made to use the Harroun Elevator at Elwood, but the new company will have no connection with Harroun.

Jacob Berry & Co., brokers in stocks, bonds, grain and cotton at 42 Broadway, New York, and members of the Consolidated Exchange, assigned to A. P. Fitch on November 26. On November 28 creditors filed a petition in bankruptcy against the firm. At the time of the assignment the attorney for the firm gave out a statement in which he estimated the liabilities at more than \$230,000 and the nominal assets at about \$150,000, with actual assets of between \$80,000 and \$90,000. The firm had a number of branch offices and had been doing an extensive business. Following the Berry failure a line of stocks held by Ignatz H. Berger, trading as I. H. Berger & Co., was posted on the Consolidated Exchange for trading, thus practically announcing the suspension of that firm. The embarrassment is ascribed to the Berry failure.

J. Lorne Campbell & Co. of Toronto assigned recently to E. R. C. Clarkson. The firm is said to have been in financial difficulties for several months, and on September 12 asked for an extension. In a statement sent out to creditors at that time, it was shown that the liabilities exceeded the assets by \$56,378, the liabilities being \$239,736 and the assets \$183,358. The liabilities to the banks amounted to \$22,000, to London agents \$66,250, to clients \$106,300, and on mortgages \$45,000. The assets included cash on hand and in agents' hands, \$1,740; margins not released, \$18,426; due from P. B. Weare & Co., secured by notes of the Chicago Terminal Elevator Company, \$21,300; due from clients, \$40,000; real estate, \$80,000; furniture and chattels, \$7,000; stocks, \$800; Toronto Stock Exchange seat, \$10,000; Chicago Board of Trade seat, \$3,000. Mr. Campbell has been a mem-

ber of the Toronto Stock Exchange for a number of years, and served for a term as president.

Owing to the death of P. F. Lucas the firms of Goffe, Lucas & Carkener at Kansas City, and Goffe, Lucas, Carkener Co. at St. Louis, have been dissolved. W. C. Goffe and Geo. S. Carkener have formed a partnership and will conduct a general grain commission business at Kansas City under the style of Goffe & Carkener. The business at St. Louis will be known as Goffe & Carkener Co., under the management of Geo. C. Martin Jr., as heretofore.

Andrew J. Toomey, secretary of the defunct Eastern Milling and Export Co., and manager of Toomey Bros. Co., flour and grain exporters of New York City, filed a petition in bankruptcy on November 19. The failure is said to be an echo of the troubles of the milling company. The petition places Toomey's liabilities at \$165,368, of which \$15,776 is secured, and nominal assets of \$120, in a debt due him. The principal creditors are Samuel T. Kerr of Philadelphia, \$50,000 damages for a breach of contract between the petitioner and four others with Mr. Kerr; W. G. Audenried Jr., also of Philadelphia, \$34,000 damages for breach of contract of the Eastern Milling and Export Co., of which the petitioner is sued as a director; City Trust Co. of Boston, \$8,766, secured, on a judgment obtained in New York against the petitioner on November 7, and Anderson Fowler, \$7,000, secured. Mr. Audenried was president of the milling company, which is in the hands of receivers, and Mr. Kerr was a director.

THE EXCHANGES

The last sale of a Chicago Board of Trade membership reported was at \$3,225 net to the buyer.

A convenient calendar pad, with the compliments of The Bourse, Philadelphia, has come to hand. It is a complete calendar for 1905 and has spaces for daily memorandum; just the thing for a busy man's desk.

Advices from Milwaukee say that the new cash grain commission rules adopted by the Chamber of Commerce are bringing in many new members. Among the recent additions to the membership are the following: John L. Tracy and Walter A. Thomas of Minneapolis, Noah Seamann of Adell, Sheboygan County, Wis.; J. F. McCarthy of Duluth and C. O. Tinkham of Stillwater, Minn.

A committee of directors of the Chicago Board of Trade is investigating complaints of commission cutting on Milwaukee-Chicago business. It has been rumored that certain houses would fill orders in either city and then transfer the trade from one market to the other and only charge a single commission, where the rules of the Board require two commissions should be charged. It is said that the investigation is the result of a specific charge.

In the case of Robert H. Thorburn, who is fighting for reinstatement as a member of the Chicago Board of Trade, the committee on legal advice, to which the directors referred the application for reinstatement, reported to the directors on November 29, recommending that a communication be addressed to Mr. Thorburn asking him whether he claimed any false testimony had been given against him in his trial by a former board of directors, and in what way, if any, that board had treated him unfairly. In answer to the communication, Mr. Thorburn stated that the hearing and action of the Board were unfair to him because he was not present at the trial. The matter has been referred to the legal advice committee.

The directors of the Chicago Board of Trade have taken action in two cases which reaffirms an old ruling. In one case a private warehouse filed charges against a discharged employe, a member, against whom it had an unpaid claim for about \$300 growing out of losses alleged to have been sustained through his errors in transmitting orders by telephone. The directors ruled that they could not interfere between employers and employes in disputes not involving violations of rules of the Board. Their decision was based on an opinion of Corydon L. Beckwith, one of the legal lights of the last generation, who was attorney for the Board some twenty-five years ago. In another case another commission firm wanted action taken against an employe who was no longer connected with the firm, but still owed \$600 on his membership, which had been bought for him by the firm. The directors held that as the member against whom the charge was brought was not a member at the time the membership was purchased for him it was not a case for action on their part.

OMAHA GRAIN EXCHANGE.

At the annual meeting of the Omaha Grain Exchange, held November 15, the old officers were re-elected as follows: President, G. W. Wattles; vice-presidents, S. A. McWhorter and E. E. Bruce; secretary, A. H. Merchant; treasurer, A. L. Reed. Directors: For three years, E. E. Bruce, A. L. Reed, A. C. Smith; for two years, G. W. Wattles, S. A. McWhorter, F. P. Kirkendall; for one year, N. B. Updike, A. B. Jaquith, Nathan Merriam. All standing committees were re-elected and the names of T. D. Worrall and A. H. Blusher were added to the quotation committee.

At a meeting of the Exchange on November 23 a change was made in the rules and regulations. An amendment was adopted providing "that on contracts for the delivery of wheat, corn and oats warehouse receipts of licensed public elevators of Chicago for same grades of grain may be delivered in this market in fulfillment of such contracts, the buyer paying the freight charges on the amount of grain called for by such receipts at the proportional freight rate in effect from Omaha to Chicago at time of such delivery."

It is believed that this amendment will result in an immediate increase in future trading.

CINCINNATI WILL REVISE RULES.

It is probable that by the first of the year the Cincinnati Chamber of Commerce will have a set of revised grain rules in force. The rules now in force were made twenty-five years ago and have been amended from time to time until, it is said, they are now more or less complex. Several controversies have arisen during the past year calling for the decision of the superintendent, who has not always found it easy to apply the existing rules to an equitable adjustment of differences under present-day conditions of the trade. The superintendent undertook to point out some of the changes that were needed, with the result that the directors finally referred the entire matter to the Grain Inspection Committee.

The committee drafted a set of revised rules and recommended them to the board. They were referred to a committee consisting of F. F. Collins, chairman; Joseph D. Morten and Walter A. Draper. The committee is now at work on the rules.

There is great anxiety on the part of the trade to have the new rules ready for the new year, and every effort will be made by the committee to finish its work so that final action by the board of directors may be had before December 30.

SEEDS

Fire in Darch & Hunter's seed store at London, Ont., recently caused damage to the extent of \$10,000. The loss is covered by insurance.

The large seed farm of the J. V. Baylis Seed Co. near Fort Fairfield, Me., has been purchased by a New Brunswick party. The consideration was \$19,500.

Farmers around Cazenovia, Minn., have found a market for the wild mustard seed which is removed from their grain when it is cleaned. The E. A. Brown Elevator Co. at that place purchases the seed and ships it to pickle factories.

Clover seed sold at the highest point on the crop yesterday, March touching \$8. The market has been a firm one lately, principally on the sharp falling off in receipts. The Red Letter ten days ago predicted much lighter receipts, and there are no signs to-day of any increase, although this advance may bring out some seed that shippers have been holding at home for better prices. It looks to us as if nearly all the crop had been marketed, and letters from various sections confirm this. The price all season has been an inducement to farmers to sell, although, of course, some got very low prices on account of their seed being of inferior quality. Foreigners do not seem to be hungry. They took seed early in the season and resold some of it. The Eastern buyers have been afraid to buy, and may wait until after the first of the year, but they will need seed this year just as they always have. Foreigners, however, may not be obliged to take much. Whether present price discounts the crop shortage is an open question. Some think it does, while others believe the supplies warrant \$9, and even higher for prime. Stock here is about the smallest ever known at this time of year, being something like 45,000 bags against 65,000 last year, 50,000 bags in 1902, 60,000 bags in 1901 and 1900, 80,000 bags in 1899, and 100,000 bags in 1898. The bulk of the stock is owned by local dealers, part probably hedged by sales of March, and part held for better prices, which most of them seem to expect.—J. F. Zahm & Co., Toledo, Red Letter of December 3.

CROP REPORTS

Drought and fly have reduced the average of winter wheat in Ohio from 87 to 75 per cent.

According to reports to the state board of agriculture, corn was a fair crop in New Hampshire this season.

The Michigan state report makes the wheat condition 93, against 99 last month and 83 a year ago. The loss is due to dry weather.

"Corn is shaping up very satisfactorily and movement will be free during the next few weeks."—C. W. HARTLY GRAIN CO., Goodland, Ind.

The special crop report for Illinois issued on November 30 stated that the greater portion of the corn crop had been husked and cribbed. The crop was generally well matured. Wheat was badly in need of rain.

The Sacramento and San Joaquin valleys of California will probably produce a large wheat crop next season. Weather conditions have been all that could be desired and a large acreage has been sown. Early wheat has a good start.

C. V. Topping, secretary of the Oklahoma Millers' Association, has issued a bulletin in which he states that there is little damage as yet to the growing wheat crop throughout the territory, but moisture will be needed prior to the first of the year.

Thornton of the Duluth Commercial Record estimates that the wheat receipts at Minneapolis and Duluth for December will exceed those of the corresponding month last year by 2,000,000 bushels. The December receipts last year were 14,455,000 bushels.

Reports to the statistical agent show that a larger acreage of wheat has been planted in Kansas this year than last. Secretary Smiley of the Kansas Grain Dealers' Association says that with the possible exception of a few localities Kansas wheat has not been injured by the long dry spell.

The Missouri December report indicates a wheat crop of 27,000,000 bushels. Growing wheat condition is 73, as compared with 85 a year ago. The area sown is 2,323,000 acres. The corn crop is estimated at 177,500,000 bushels, against 204,000,000 bushels last year. The quality is 81 per cent.

On November 29 Finance Minister Osma introduced a bill in the Spanish Chamber of Deputies imposing 80 cents duty on imported corn (per 100 kilos) and \$1.40 on imported flour (per 100 kilos) whenever the price of Spanish wheat exceeds \$5.60 per 100 kilos. The new duties will become effective immediately after the bill is approved by the cortes.

The Union Pacific has issued an estimate on the crop of Nebraska for 1904. The yields, as compared with 1903, are as follows:

	Bushels.	
	1904.	1903.
Winter wheat	22,954,440	32,346,627
Spring wheat	3,981,628	5,786,798
Corn	211,330,303	197,406,666
Oats	69,410,312	62,217,284
Rye	1,989,883	5,625,382
Barley	5,655,781	3,148,186

Director Sage of the Iowa state agricultural bureau claims that the government statisticians did not give his state credit for as big a corn acreage this season as it is entitled to. "Our acreage," he says, "will be over 9,000,000 acres. Over 90 per cent of the crop this year will be merchantable and as there will not be as much feeding this season as last, a larger proportion of the corn will be shipped. This corn still contains a good deal of moisture, but the quality of the grain is excellent, the cobs being large and the kernels plump and well filled."

The Ohio report for December estimates the corn crop at 91,993,448 bushels. The corn area this year was a good average in amount as compared with a number of years past, but the product per acre is below an average, and considerably lower than Ohio is able to produce under more favorable conditions; however, the total product for the state, nearly 92,000,000 bushels, is a remarkably good showing, considering that many counties produced very lightly, but it occurs that where production is lightest it is in counties having smallest area, while the counties having large corn area show good and even excellent production, and this accounts for the good result on the whole.

The secretary of the Kentucky state board of agriculture, in a letter to C. A. King & Co. of Toledo, says: "I returned yesterday from a tour of the state. The newspaper reports of the drought have not been exaggerated. It is the severest in the history of the state. All fall-sown grass seed is lost. Many fields of wheat, rye and winter oats sown in October, the grain remains in the ground unsprouted. The drought is now being broken by damp, misty weather, with prospects of a good rain. However, only about one-quarter of an inch has

fallen up to this time. It is hard to estimate the effects on the wheat and rye crop. Should we have a good rain and the weather remain warm, it is probable that grain would yet germinate and might do well. On the other hand, if winter sets in bad and continues it will be fatal to grain crops."

The extent of the damage to growing wheat in Indiana by drought has not been estimated by the state crop bureau, but private advices say the plant has suffered greatly. The final figures for the 1904 crop, as compiled by State Statistician Johnson, show a wheat yield of 13,371,340 bushels, as compared with 27,713,357 bushels in 1903. The 1904 corn crop was 132,807,473 bushels, against 143,059,459 bushels in 1903.

In Secretary Coburn's summary of the agricultural products of the state for 1904 it is stated that the corn crop amounts to 132,021,774 bushels, which is 37,337,995 bushels less than one year ago; its value is \$50,713,955. The returns this year present an unusual circumstance in that by far the larger yields per acre of corn are almost invariably found in the central third of the state popularly referred to as "the wheat belt." In aggregate yield Jewell leads with 6,400,680 bushels, Smith coming next with 5,819,485 bushels and Phillips third with 4,954,212 bushels. The counties having the largest average yields per acre are Phillips with 38 bushels and Smith and Rooks with 35 bushels each. The oat crop is placed at 21,613,357 bushels, valued at \$6,872,890.

Liverpool Corn Trade News makes the following summary of the foreign wheat situation: United Kingdom, Germany, Austria-Hungary—Weather generally seasonable, although more snow is wanted. Roumania—Crops have good snow covering and stocks are accumulating. Russia—Weather milder in South and snow is thawing. Otherwise conditions are satisfactory. Bulgaria—Outlook favorable. North Africa—Good rains have fallen. France—There has been some snow and rain. Crop rather unsatisfactory. Australia—Chartering of cargo room continues. India—Reports favorable.

The Bulletin des Halles (France) makes the following estimate of the world's production of wheat in 1904:

Grand Division—	1903. Bushels.	1904. Bushels.
Europe	1,697,108,750	1,496,213,750
America	847,561,250	766,125,000
Asia	380,793,500	436,975,000
Africa	53,061,250	55,898,750
Oceania	82,287,500	61,006,250

A comparison with previous figures shows that the crop of 1904 in Europe was 200,895,000 bushels less than in 1903; that the crop of America was 81,436,250 bushels less than in 1903, and that the crop of Oceania was 21,281,250 bushels less than in 1903. The crops of Asia and Africa, on the other hand, have increased by 56,182,500 and 2,837,500 bushels, respectively. The crop in France shows a shortage of 62,425,000 bushels.

Returns to the chief of the bureau of statistics of the Department of Agriculture indicate that the newly seeded area of winter wheat is about 31,155,000 acres, a decrease of 1.6 per cent from the area sown in the fall of 1903, as finally estimated. The condition of winter wheat on December 1 was 82.9, as compared with 86.6 in 1903, and a ten-year average of 92.1. The following table shows for each of the principal states the percentage of acreage sown to winter wheat this fall, as compared with that sown last year, the averages of condition on December 1 of the present year, the corresponding averages for 1903, and the mean of the December averages of the last ten years:

States.	Acreage Compared With Last Year.	Average Condition December 1.		
		1904.	1903.	Ten-year
Kansas.....	99	81	87	92
California.....	102	96	97	96
Missouri.....	95	77	87	93
Indiana.....	88	77	84	90
Nebraska.....	102	93	90	91
Ohio.....	99	76	80	88
Illinois.....	106	82	85	93
Pennsylvania.....	99	86	91	95
Oklahoma.....	90	68	80	96
Texas.....	90	80	84	90
Tennessee.....	103	82	80	80
Michigan.....	110	88	85	86
United States.....	98.4	82.9	86.6	92.1

The newly seeded area of winter rye is provisionally estimated at 96.7 per cent of the area sown in the fall of 1903. The condition of winter rye on December 1 was 90.5, as compared with 92.7 on December 1, 1903, and 96.2, the mean of the December averages of the last ten years.

At Grand Forks, S. D., on December 1, no less than twelve to fifteen men were in jail, held on charge of smuggling wheat from Canada.

"I enclose \$1 for subscription to the 'American Elevator and Grain Trade.' I have been well pleased with the paper in the past year and certainly want to continue."—J. W. Radford, chief grain inspector of Kansas.

VALUE OF A NEARBY GRAIN MARKET.

[From an address by A. B. Stickney, president of the Chicago Great Western Railway, before the Bankers' Association of the State of Nebraska, in eighth annual meeting, at Omaha, on October 27, 1904. Mr. Stickney's topic was "Nebraska's Opportunity to Increase the Prosperity of Her Farms."]

[Mr. Stickney, while recognizing that "production is fundamental," states there is also the "department of distribution, . . . dependent upon production, because things must be produced before they can be exchanged." He contends, then, that farmers produce well, but are robbed of a percentage of their rewards "by the fault of the commerce department in failing to provide a nearby market for grain." He then proceeds:]

Before recounting the demonstrations which have been made of this important fact, let us consider what constitutes a grain market.

It consists of a large number of active, intelligent grain dealers congregated in a market town, intent upon making a profit of an eighth to a quarter of a cent per bushel for themselves. But the nature of this business is such that every time they make an eighth or a quarter for themselves they are compelled to make more for the farmers than they get for themselves.

If we analyze the work of such men we see that while they are not philanthropists, and are all the time working for their own profit, in effect they spend their time, talent and energies in obtaining for the farmers the highest possible price at the least possible expense.

By the use of the telegraph they keep in touch with all the markets of the world and with consumers of grain, in order to take advantage of the slightest increase in the demand which would advance prices. They also keep informed as to all the channels of transportation which reach such markets and consumers, in order to be prepared at all times to avail themselves of the cheapest means of transportation to reach the area of highest prices as they develop from day to day. If some freight agent in any part of the United States or if any ship which sails the seas lets a stitch drop in rates, these market makers seem to know it by instinct and take advantage of it instantly; in fact, they scent a low rate quicker than a high price. They perform a work for the farmers which the farmers, living on their isolated farms, cannot do for themselves. It is work which even the Legislature cannot do for them.

In a fully developed market there is another class of dealers who own elevators, who are more than mere "rooters" for prices and rates. They buy the grain, store it and carry it from the time of the annual glut, immediately following each harvest, until it is required for actual consumption. But the rooters establish the prices and they make the elevator men pay more than the equivalent of the highest price which can be obtained in any of the other markets of the world. And experience has proven that the elevator men in the nearby market town can afford to pay more than the equivalent of the market price in any more distant town.

The indisputable proof of this proposition is the fact that in all highly developed nearby markets the elevator men buy the grain, and if they should refuse to pay more than such equivalent the "rooters" would ship it.

In recounting the demonstrations that a nearby market adds to the value of agricultural products in the hands of the farmers, I shall cite only examples with which we are familiar.

I call attention first to the magnificent live stock market—second to none—which has been established in South Omaha. Prior to its establishment, when the farmers of Nebraska sold their live stock, they were obliged to accept the Chicago market price, less the cost of transportation, say 700 miles, to Chicago. To-day they sell such stock at the market price in Omaha, less the cost of transportation, only 200 miles, to Omaha, and the market price at Omaha is always nearly, and sometimes quite, as high as at Chicago. It is always higher than the equivalent market price in Chicago, except, perhaps, on a few special grades. It is beyond question that the establishment of the Omaha nearby market for live stock has increased the income of the farmers of Nebraska millions of dollars annually.

Notwithstanding the enormous advantage which the Omaha nearby live stock market has been and is, the establishment of a nearby grain market would be of greater advantage to the farmers of Nebraska, because there never is, and never can be, such a surplus of live stock thrown on the market at once as there is of grain following each annual harvest.

It is not so with grain. Grain does not mature, and cannot be harvested, every day in the year. It matures and can be harvested only once in each year. All the grain raised in Nebraska matures in the same few days in each autumn, and all the small grains must be harvested within a week or ten days after they mature. As all the vast crop of

grain matures at the same time, and must be thus harvested, it cannot, like live stock, be consumed as fast as harvested. The relation of supply and demand and the consequent prices cannot be regulated, as in the case of live stock, by delaying the harvest a few days. The whole year's crop comes on the market at once, and the relation of supply and demand, which determines the prices, must be regulated by storing and holding. Practically a whole year's crop must, therefore, be stored somewhere, and dealt out to the consumers as demanded during the three hundred and sixty-five days following each harvest.

The aggregate crop of a year is so vast that if accumulated and stored in any one market town, though as rich as Liverpool, or New York, or Chicago, it would make so large a "visible supply" and, for the moment, so great a surplus that it would break down the price far below its real value, and far below the cost of production.

It is evident, therefore, that market towns, with merchants and elevators, are much more important for grain than for live stock.

The Need of a Nearby Market.—Experience has proven that the market nearest the point of production can and does pay the farmer more for his grain products than a distant market.

Experience has proven that if Nebraska grain, instead of being sent to Chicago for storage, could be stored in a market town in Nebraska, it would add several cents per bushel to its value in the hands of the farmer, which, in the aggregate, would add millions per year to the income of the farmers.

The first example of the advantage which the farmer derives from the existence of a nearby grain market is the well understood advantage which all the farmers of the West derived from the establishment of the Chicago grain market.

Prior to the establishment of that great market, the local buyer of grain, who had to hunt for a chance customer to buy from him, worked on the basis of a margin of profit of from ten to twenty cents per bushel, which the farmers had to pay. Since its establishment the local buyers are willing to work on a margin of a fourth, or eighth, or sixteenth of a cent per bushel, which is all the farmer now pays the middleman, against ten and twenty cents before.

At the time I migrated from New England, which was before Chicago was a market town for grain, the New Hampshire farmer sold his wheat for \$1.50 per bushel, payable in gold, and the Illinois farmer sold his wheat for thirty cents per bushel, payable in "bobtailed" money.

Kansas City Market.—The next example is the Kansas City market, which is not a highly developed market. It has few elevators and performs little service for the farmers or itself in the matter of storing and carrying the surplus from harvest to consumption. But it has half a hundred or more dealers who perform services for the farmers in "rooting" for high prices and low rates, for which they exact a commission of an eighth to a quarter of a cent per bushel. What is the result?

It is within your knowledge that the farmers of Kansas who live within the influence of the Kansas City market receive several cents a bushel more for grain than the farmers of Nebraska.

The Minneapolis Market.—Another example to which I call your attention is the Minneapolis market, which is a highly developed market. It not only works the markets of the world for the highest prices, and the transportation companies for the lowest rates, but it buys the farmers' grain at extraordinarily high prices, always much higher than the price in any other market in the world would at the time justify, and stores and carries it until demanded for ultimate consumption.

While it is in its elevators it cleans it and mixes it and sorts it. It sorts it into chicken feed, sheep feed and human food. It sells it short and buys it back again, and finally, toward the end of the year, when the visible supply has been reduced, it sells it at a profit.

The Minneapolis market pays the farmers in Minnesota about seven cents a bushel more for wheat than the Nebraska farmers get for their wheat.

This is not a mere oratorical statement unsupported by an investigation of the facts. In order that I might be sure of the important fact, I have had an expert tabulate the prices of grain in Minneapolis and Chicago day by day for two successive years, 1901 and 1902. In January, February and March, 1901, the price was actually higher in Minneapolis than in Chicago. Taking the year as a whole the average price in Minneapolis was only one and a half cents per bushel below the price in Chicago.

In May, June, July and August, four months of 1902, the Minneapolis price was higher than the Chicago price, and during the whole year the average Minneapolis price was one-half cent above the average Chicago price.

The average Minneapolis price for rye during the two years was only one and a half cents per

bushel below the Chicago price, and for barley four and a quarter cents below.

Now let us see how the Nebraska prices compare with the Chicago prices.

It is well known that the price of grain on the farms in Nebraska is the Chicago price less the cost of transportation to Chicago, which averages about 13.8 cents per bushel. But, for the purpose of our comparison, only the cost of transportation from the Missouri River to Chicago should be considered, which has been about 7.2 cents per bushel, making a difference in favor of the Minnesota farmer, due entirely to the existence of the nearby markets of Minneapolis and Duluth, of seven cents per bushel on wheat and rye, and about three cents per bushel on barley.

Part Played by the Mills.—The probable value of the mills of Minneapolis in respect to prices is fairly disclosed in the statistics of prices which I have quoted. The average price of wheat, which is milled at Minneapolis, is only one cent less than the Chicago price, while the average price of rye and barley, which are not milled at Minneapolis, is from one and one-half cents per bushel on rye to four and a quarter cents on barley less than Chicago. The difference in favor of wheat may fairly be credited to the influence of the mills upon the market.

It seems, therefore, evident that the manipulating machinery of the elevators affects market values more than the machinery of the mills.

Now let us consider the milling of grain. The same transportation and market reasons which I have already stated, which make the grain market nearest the source of production the most economical place to store grain, make such a point the most economical place to mill grain. But the milling of grain at such a point requires the co-operation of a developed market with elevators and grain merchants to accumulate, store and carry the grain in that market, otherwise in the few months following the harvest the grain will move forward to some more distant markets and leave nothing to be milled during the subsequent months of the year. To dam up and hold the stream of wheat which would otherwise pass through Minneapolis, and leave the great flouring mills idle during the latter month of the crop year, requires forty-two elevators with a storage capacity of 36,000,000 bushels. Without these reservoirs the magnitude of the present flouring mill industry at Minneapolis could not have been attained. The amount of capital required to both hold the grain and manufacture the flour could not be commanded by the mill companies alone; besides, the profits of the milling business would not justify the risks. By means of the independent elevator companies and the market, dealing in futures, this risk is distributed among a large number. In effect the market is an insurance company, guaranteeing both the future price of the grain and of the products of the mills.

Future of Milling Spring Wheat.—It is probable that the milling business in the spring wheat districts has reached its zenith, because it is probable that the production of spring wheat will not increase. Spring wheat seems to be a plant which requires a virgin soil to produce. New York, Northern Ohio, Northern Indiana, Illinois, Iowa and Southern Minnesota in turn have produced it in great abundance, followed by their soils refusing to produce it longer. Then the production was transferred to the virgin soil of Northern Minnesota and the Dakotas, and the maximum of production in these areas has been maintained by bringing under cultivation new areas of virgin soil, which process has about reached its limit. There is very little uncultivated virgin spring wheat soil left to be brought under cultivation in the United States, and it is probable that a few years later the northern flouring mills will have to look to the northwestern territory of Canada for their supply.

The production of the winter wheat plant seems to be more permanent. The soils which produced winter wheat a century ago are still producing. This, taken in connection with the facts which have been stated in regard to the spring wheat plant, is causing many of the northern millers to consider the advisability of transferring a part of their operations to the winter wheat districts. Already one of the largest milling corporations of Minneapolis has provided itself with a mill at Buffalo, another at St. Louis and another at Louisville, Ky.

The president of one of the Minneapolis corporations, and one of the largest country milling firms, have discussed with me the advisability of building a mill at Omaha and another at Kansas City in such a way that I feel justified in saying that as soon as the market at Omaha is established, with elevator companies having storage and carrying capacity, a flouring mill of not less than 5,000 barrels per day capacity will be put in operation at Omaha.

I believe that the establishment of one independent elevator company, with capital sufficient to build an elevator, and with sufficient capital to deal in grain, and with sufficient courage to buy

grain and store it in Omaha, would be followed, almost immediately, by the erection of such a mill.

Such a milling interest is undoubtedly a valuable factor in establishing a highly developed grain market, but at the same time it is my opinion, based upon careful consideration of the history of grain markets, that mills are not essential, and that there are only three essential factors to a grain market:

First—A territory producing a sufficient quantity of grain.

Nebraska is such a territory. The United States census crop year 1899, the census of 1900, gives Nebraska a total production of 296,916,910 bushels of grain, which is 52,000 bushels more than the aggregate production of the state of Minnesota, which has built up two magnificent markets, one at Minneapolis and the other at Duluth.

Second—Grain merchants with capital, push, capacity and elevators.

Third—A location in proximity to the source of the supply, so located in respect to incoming transportation facilities that a sufficient quantity can be aggregated to justify a market, and so located in respect to outgoing transportation facilities that the grain can be distributed to all points of the compass to the ultimate customers.

Omaha is such a location. All the railroads which traverse the grain-producing territory of Nebraska converge upon Omaha, and all the railroads which will ultimately distribute the grain to customers diverge from Omaha. It also possesses one of the greatest live stock markets, not only of the United States, but of the world. It possesses capital and banking facilities. It possesses every factor of a great grain market, excepting elevators and a sufficient number of grain merchants. It already possesses a few merchants and is pregnant with embryo, which only requires fructifying with an abiding faith to become full born, aggressive grain merchants and elevator men.

A Good Start Made by Omaha Exchange.—The foundation of the Omaha grain market has been laid. The old adjustment of railway rates, which imposed a penalty of about five cents per bushel on grain which stopped in Omaha for market purposes, has been abolished.

The new adjustment places Omaha on as favorable a basis in respect to tariff rates as Kansas City and Minneapolis.

Encouraged by this adjustment of rates the Omaha Grain Exchange has been formed. The citizens of Omaha, regardless of occupations, patriotically came forward and bought memberships, and a market has existed for nearly a year.

Notwithstanding the Exchange commenced operations in February, 1904, after the principal part of the crop of 1903 had been moved, in the eight succeeding months, to the end of September, it has dealt with over 9,000,000 bushels, a larger quantity than was marketed in Minneapolis in whole years in the early history of its Grain Exchange.

I congratulate the members of the Exchange upon the favorable showing of their first eight months' business.

Omaha, as yet, lacks facilities for handling grain. The matter of providing such facilities is more a matter of men to manage than of capital. Merchants are born—not made. Finding born merchants to manage the business, the capital will be forthcoming. When I reflect that the late Mr. Armour started his commercial career an unknown boy driving from farm to farm buying eggs and butter, and that the late Mr. Swift, the founder of Swift & Co., started life a like unknown boy traveling from farm to farm buying hogs, which he personally took to the market, and that the late Mr. Peavey started the buying of grain with only his hat for his counting room and his storage house—his storehouse containing more brains than grain—I am constrained to believe that the unknown boy has already been born who will lead off in making the Omaha grain market—like the Omaha live stock market—one of the greatest markets of the world.

NAILING GRAIN DOORS.

General Superintendent Bury of the C. P. Ry., central division, has issued the following circular: "Cars and grain doors have been greatly damaged, and serious inconvenience has resulted in handling of grain at lake ports, by shippers nailing grain doors in cars. In the aggregate the expense and inconvenience has assumed such magnitude that extreme measures must be taken to stop this practice. Agents are required to see that grain doors are not nailed in cars at their station, and will notify shippers that persistence in the practice will result in legal prosecution. In any event consignors will be required to pay for the damage to rolling stock. The agent at Fort William will furnish each superintendent with a list of cars loaded on his district with grain doors nailed, so that it can be taken up with the consignors, and will also see that the amount of the damage to the cars is charged against the grain."

COURT DECISIONS

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL. B., of the Chicago Bar.]

Right to Recover for Loss of Grain Under Kansas Statute.

Under Section 6 of Chapter 100, page 176, of Kansas Laws of 1893 (Section 5943, General Statutes of 1901), the right to recover from a railway company for loss of grain delivered to it for transportation is expressly restricted to the consignee, his heirs or assigns. And the Supreme Court of Kansas holds (Weber vs. C., R. I. & P. Ry. Co., 77 Pacific Reporter, 533) that, in an action based on the statute, the owner and consignor of grain delivered to such carrier cannot recover for loss or shortage of grain received by it for shipment. The court says that it is a well-known commercial usage for shippers to make drafts on their consignees, with bills of lading attached, and obtain the amounts drawn for at a bank before the receipt of the grain at its destination. The protection of the acceptors of such drafts from loss may have been the legislative purpose in permitting the consignees, their heirs or assigns, alone to maintain an action under the statute for shortage.

Nor does the court think that Section 26 of the Civil Code of Procedure, which requires that every action must be prosecuted in the name of the real party in interest, has any application. On the other hand, the court says that in view of the decision in *Railway Co. vs. Simonson*, 68 Pac., 653, 64 Kan., 802, it is doubtful whether there is any vitality left in Chapter 100, page 175, Laws 1893 (Section 5938 to 5947, both inclusive, General Statutes 1901), for the reason that with that part of Section 6 omitted, which makes the bill of lading conclusive proof of the amount of grain received by the carrier, can it be said that the legislature would have enacted the law?

Construction of Contract for Grain.

The Supreme Court of Errors of Connecticut says, August 12, 1904, that the finding of the trial court in the case of *Soper and others vs. Tyler* (58 Atlantic Reporter, 699) showed that the plaintiffs were wholesale dealers in grain at Boston, buying their grain mainly in the West; that it was the custom of such dealers to consign grain so bought in carloads to New England points, with directions to hold it at West Albany or some other railroad point on the Hudson River for further orders; that among grain dealers the words used in their letter of June 22d, to be shipped prompt, meant shipment within ten days, and the words, "Line via H. R.," meant that, if "all-rail," it would be made by way of the Harlem River, in New York, the shipper having the option of diverting the cars at Albany, Poughkeepsie or New York City; that on June 13 ten carloads of oats had been bought by the plaintiffs in Chicago, to be consigned to them at Bridgeport, Conn., with instructions to hold them at West Albany until further orders; that on June 26 the firm bought from in Chicago shipped two cars of oats so consigned; that the numbers and invoices of these cars were sent by the plaintiffs to the defendant on June 30; that the cars reached West Albany on July 17, when the plaintiffs ordered them to be forwarded to their order at Waterbury, Conn.; that the original bills of lading were then indorsed by the railroad company, "Consignment changed, without recourse, to the order of J. E. Soper & Co., Waterbury, Conn., July 17, 1899, notify William M. Tyler;" that on July 25 the cars arrived there, but the defendant, though duly notified, refused to accept them; and that from four to six weeks is a reasonable time for transporting a carload of oats from Chicago to Waterbury.

In affirming a judgment for the plaintiffs, the Supreme Court says that when the defendant made his contract with a Boston grain dealer, the meaning of any technical terms used in expressing it, as far as they were terms of common use in the grain trade at Boston, was to be determined by such usage. By the usage of the trade "to be shipped prompt" meant to be shipped within ten days. But from where? It is a proper matter of judicial notice that the great grain fields of the country lie west of the Hudson River. The Harlem River runs through New York City from the Hudson to Long Island Sound. The only stipulation as to the route by which the oats were to come was that it was to be on a line via the Harlem River. This phrase had a settled meaning in the Boston grain trade. It refers to shipments from points west of the Hudson River to New England points, with the right in the dealer of diverting the cars at Albany, Poughkeepsie or

New York City to any points which he may designate.

The contract did not limit the plaintiffs to a shipment from any particular point in the West. At its date they had become the purchasers of ten carloads of oats at Chicago. Two of these they caused to be forwarded by rail from Chicago, in the customary way, sending on the invoices with the car numbers to the defendant within eight days after the contract of sale to him. The cars arrived at Waterbury within six weeks from the date of the contract. The trial court, in rendering judgment for the plaintiffs, must have held that Chicago was a proper place of shipment. As a great shipping point for grain, it might well be deemed such a place, under the usage of the Boston grain trade. The defendant, indeed, had on previous occasions purchased oats by the carload from the plaintiffs, which had been forwarded to him from New York City, and supposed when he made the contract that the words "Line via H. R." meant that the cars would be shipped from Harlem River; that is, from New York City. But this misunderstanding of a term of trade, however unfortunate for him, could not vary the rights of the other party.

Then it was contended that, even under the usage found by the trial court, the place of shipment of the grain in question was West Albany, since there its destination was changed from Bridgeport to Waterbury. But the bills of lading bore upon their face directions to the railroad company to hold the cars at West Albany for further orders. Instead of sending them on to Bridgeport, the company might be required, and was required, to forward them to Waterbury. The whole transit from Chicago to Waterbury was under a single and indivisible contract of transportation, the terminus from which was fixed at the outset; the terminus to which was left to be fixed by orders to be given when a certain point had been reached; but that such orders might be given and must be obeyed was an integral and important part of the original bargain between the shipper and the carrier. West Albany was a point of transfer, not of shipment. A single bill of lading was issued for each car for the whole transit from Chicago to Waterbury, and the indorsement of the change of consignment on July 17 had simply the effect of designating one out of a number of points to which the shipper had from the beginning the right to direct a delivery.

The Agricultural Department, by direction of Congress, supplies senators and representatives with packages of garden and flower seeds, which they send to their appreciative constituents by mail, and all at the expense of taxpayers. This year, it is stated, no less than 45,000,000 packets will be sent out, few of them differing in any respect from those on sale at retail seed stores. A number of congressmen have told of the effect upon the minds of some of their intelligent constituents.

Representative Stevens of Minnesota relates that he received a letter from one of his constituents acknowledging the receipt of a package of garden seeds, loading him down with thanks and adding: "Please send me a sack of oats, a sack of corn and as many trees as you can get at the Agricultural Department."

Minnesota, someone may say, is part of the "wild and woolly West," and cannot be expected to be rich in sowing common sense. Well, then, here is one from cultured Boston: A congressman representing a district of that city sent some packages of flower seeds to urban constituents. One of them answered, returning thanks, announcing his intention of planting the seeds in his back yard, and adding the request that the M. C. obtain from the government and forward him a lawn mower, a set of garden tools and 100 feet of black hose.

A representative from a northwestern state received from a constituent a requisition for seeds for himself and a number of relatives, concluding thus: "I also want a gasoline engine of eighteen horsepower, a wood saw and a barrel of gasoline. Please send them right away."

Representative Cooper of Wisconsin had been sending seeds to a constituent for a number of years when he received a letter of thanks ending with these words: "Please do not send me any more, as our canary bird died ten days ago. The bird did not seem to thrive on the seed you have been sending."

There may be some question whether those constituents, who seem to have written good English in every case, were in hard earnest or merely gulling. In either case their epistolary efforts would suggest that government might expend time and money to better advantage than in sending some scores of millions of packages of seeds every year to people who can get the same kind of seeds if they want them at the nearest good city seed store or country general store.

It might about as reasonably "take over" the private business of dealers in lamp chimneys, gas tips, garters, shoe laces and patent buttons that you fasten to your trousers without thread.—Ex.

IN THE COURTS

Henry Hall has sued the Osborn Grain Co., Minneapolis, for \$1,411.25, alleging that he gave the members of the company \$1,000 to invest for him. The money was invested, and, plaintiff says, there was a profit of \$595.25, but no settlement was made.

Referee Eastman, to whom the suits filed by the trustees of the estate of Henry B. Smith, bankrupt, for recovery of money lost in speculation, were referred, decided, on December 4, that actions for such claims for the benefit of a bankrupt could not be recognized.

The St. Anthony and Dakota Elevator Co. of Minneapolis has begun an action to recover \$2,451.94 against the Aetna Insurance Co. of Hartford, the amount being the alleged shortage of Fred Wilkinson, agent of the plaintiff, in 1903, at Perth, N. D.

A suit filed in the Common Pleas Court, Steubenville, Ohio, on November 28, asks for the appointment of a receiver for the firm of James M. Kellar Co., the feed and grain merchants. The company owes about \$1,000, and has assets of grain, wagons, etc., of \$2,300, and accounts nominally worth \$800.

Herman Haase, an attorney, on December 4, began suit for himself and for the use of Cook County against Ware & Leland, brokers, for \$75,000. The plaintiff declined to divulge who had incurred the alleged losses, but said the action was brought under the gambling statute, which provides that any citizen may bring suit to recover money lost in speculation for three times the amount, whether he was the loser or not.

In the case of Temple & Dittman against Edwards-Wood Co. of Minneapolis, tried at Atlantic, Iowa, on November 10, to recover some \$2,000 for money advanced to the brokers as margins for grain transactions, the court directed a verdict today for the defendants. The evidence showed that Edwards-Wood Co. reported all transactions promptly and that their dealings were fair. The plaintiffs failed to prove any unfair dealings.

An action in involuntary bankruptcy has been brought at St. Louis against Thos. A. Cleage, by the Laidley Grain Commission Company of Chicago, the T. E. Price Commission Company and the William Lamping Grain Commission Company of St. Louis. J. A. La Tier of Iowa and Mrs. Montgomery of St. Louis. In their petition the plaintiffs aver that Cleage owes them an aggregate of about \$20,000. The entire amount of his liabilities has not been disclosed, but at a hearing on December 6, Miss Miller, Cleage's stenographer, testified that the number of creditors do not exceed a thousand.

Reference was made some months ago in these columns to an insurance case, in which the matter of securing loans from a receiver to a country elevator operator by assignment of the interest of the insured in the insurance policy in case of loss, was involved. The case was that of *The Farmers' Independent Elevator Company vs. The Hartford Fire Insurance Company*, tried at Fargo a few days ago. The action was brought to recover \$5,500, representing an insurance of \$1,500 on an elevator building at Denbigh, N. D., which burned a year ago, and \$4,500 on the grain stored therein. There was other insurance on the same property by several companies, or what is known as concurrent insurance, amounting in all to above \$21,000. This action was against one company only. The insurance company resisted payment on several grounds; one, that the building was located on leased ground, which was not stated in the policy of insurance; that no permission was given in the policy for concurrent insurance; that the elevator did not contain the amount of grain at the time of the fire, as was contended. The defense endeavored to show that a portion of the grain could have been saved after the fire by proper handling. It was also held that there was an excess of grain receipts over the amount of grain in the building, and that some of the names to whom tickets were issued are of persons who never lived in or near Denbigh. While the *Farmers' Independent Elevator Company* appeared as the plaintiff in the action, the real plaintiffs were Edwards-Wood Company, to which firm the insurance policies had been assigned as collateral security for a loan made to the *Farmers' Company*. The taking over of indorsed fire insurance policies on grain is a common practice among commission firms engaged in grain buying and handling, and the result of the present litigation was watched for closely by these interests, as the question whether these assigned policies are good security for the vast sums frequently outstanding as loans to country elevator operators on their property is an important one. In the case at bar, the decision was, in brief, a verdict for the plaintiffs for the amount of insurance on the elevator, but for none on the contents.

HAY AND STRAW

Hay pressers are busy around Goldfield, Iowa. Good clover hay is reported scarce at Baltimore. Heavy hay shipments from Baraboo, Wis., are reported.

Considerable hay is being baled in the vicinity of Manistique, Mich.

Hay receipts at Pittsburg are reported light with demand for clover and clover mixed.

The Missouri hay crop is said to be the largest in years and a great deal will be shipped from that state.

R. S. Sterling & Co. of Saratoga, Texas, are reported to be building a hay, grain and feed store at Sour Lake, Texas.

E. G. and O. W. Rothenberger have purchased George W. Legler & Co.'s hay, flour, feed and grain business at Leavenworth, Kan.

The John E. Hall Commission Co., hay and grain dealers, is reported to have withdrawn from the St. Louis Hay Receivers' Association.

Receipts of hay on the Baltimore, Md., market for November were 5,735 tons, as compared with 5,656 tons for the corresponding period last year.

While a large amount of hay has been baled in the vicinity of Weston, Ore., this year, very little has been shipped, as growers are holding on for higher prices.

The committee on hay and straw quotations of the Baltimore Chamber of Commerce for the current month is composed of H. C. Jones, J. M. Frisch and R. C. Wells.

A warehouse at Ladonia, Texas, owned by J. R. Eaton, containing between forty and fifty tons of hay, was burned on December 3. There was \$2,000 insurance on the property.

H. D. Eidman & Bro., hay and feed dealers of Baltimore, Md., are rebuilding their warehouse in that city which was burned on November 2. The insurance has been adjusted.

The S. R. Jaques & Tinsley Co.'s hay warehouse at Macon, Ga., was partially destroyed by fire on the evening of November 27. The loss is between \$5,000 and \$10,000, covered by insurance.

The hay and feed store at Omaha, Neb., conducted by Abraham Blatky, was damaged to the extent of about \$50 on the night of November 28, by fire supposed to have been started from a lighted cigarette.

A late Pittsburg report states that the demand for best hay continues as strong as ever and the lower grades are finding a better sale. Prairie hay cuts no figure there as yet, as there are no inquiries for it. The price of rye straw has declined a little.

The dearth of rye straw in the East still continues, with prospects that straw will reach the high prices of last winter or even higher. The production of rye in the West is decreasing year by year and spring wheat is taking its place. As a result the shipments of rye straw from that section have fallen off. Some rye is raised in the New England states and other parts of the East, but not as much as formerly. The straw is largely used as bedding for horses and that coming to this country from Belgium and France was considered especially good for this purpose. It was excluded by the government last year, however, on the grounds that it was liable to introduce the foot and mouth disease among animals in the United States. If the embargo is not lifted this season dealers state that they expect to see rye straw reach prohibitory figures before next year's crop is harvested.

Concerning the Eastern hay trade a recent report from Boston says: "The shipments of hay grade remarkably well, most of it being classed as No. 2 or better. The lower grades, which were so plentiful last year, are actually in short supply at the present, and those who are looking for low-priced hay find some difficulty in filling their orders. As a result, the trade in lower grades is the most active part of the market. Clover hay is considerably more plentiful on account of shipments from Canada. The Canadian growers receive about \$9, after paying duty and freight. The market for rye straw has improved somewhat, receipts on hand being largely cleared away. Not much more will arrive by canal before the close of navigation, and as the future supply will have to come by carload at higher rates of freight, the price of rye straw may advance."

REVIEW OF THE CHICAGO HAY MARKET.

Prices ruling for hay in the Chicago market during the past two weeks, according to the Daily Trade Bulletin, were as follows:

During the week ending December 3 quotations

at the close of the week ranged as follows: Choice Timothy, \$12.00@13.00; No. 1 Timothy, \$11.00@11.50; No. 2 Timothy, \$9.00@10.00; No. 3 Timothy, \$8.00@9.00; Choice Prairie, \$11.00@11.50; No. 1 Prairie, \$9.50@10.00; No. 2 Prairie, \$8.00@9.00; No. 3 Prairie, \$6.00@7.00; No. 4 Prairie, \$5.00@5.50. Inside prices on Prairie Hay for State and outside for Kansas, Nebraska and Iowa Hay. Sales ranged at \$8.00@13.50 for poor to fancy Timothy, \$7.00 for Mixed Hay, and \$7.00@10.00 for Iowa, Dakota, Nebraska and Kansas Prairie Hay. Rye Straw sold at \$8.50@9.00, and Oat Straw at \$7.00. The receipts for the week were 6,230 tons against 5,431 tons for the previous week. Shipments for the week were 284 tons, against 137 tons for the previous week. A good demand existed for Timothy Hay during the past week and the market ruled firm. The offerings were only moderate and all consignments sold readily. Prices unchanged. The inquiry for Prairie Hay was very fair, especially for the cheaper grades, and the market ruled steady. The arrivals were moderate and the market closed well cleaned up.

During the week ending December 10 quotations at the close of the week ranged as follows: Choice Timothy, \$12.00@12.50; No. 1 Timothy, \$11.00@11.50; No. 2 Timothy, \$9.50@10.50; No. 3 Timothy, \$8.00@9.00; Choice Prairie, \$10.50@11.00; No. 1 Prairie, \$9.50@10.00; No. 2 Prairie, \$8.00@9.00; No. 3 Prairie, \$6.00@7.00; No. 4 Prairie, \$5.50@6.00. Inside prices on Prairie Hay for State and outside for Kansas, Nebraska and Iowa Hay. Sales ranged at \$8.00@13.00 for poor to choice Timothy, \$8.00 for Mixed Hay, and \$7.00@10.50 for Iowa, Nebraska and Kansas Prairie Hay. Rye Straw sold at \$9.00@10.00, Wheat Straw at \$1.00, and Oat Straw at \$7.00@7.25. The receipts for the week were 6,572 tons, against 6,230 tons for the previous week. Shipments for the week were 62 tons, against 284 tons for the previous week. The offerings of Timothy Hay were liberal and only a moderate demand existed during the past week. Local dealers were taking hold rather sparingly and there was no shipping inquiry. The feeling was weak and prices declined 50c per ton. The market for Prairie Hay ruled dull. Only a light demand existed and the offerings were large. Receivers experienced considerable difficulty in disposing of consignments, especially the low grades.

SHRINKAGE OF HAY AT THE FARM.

Hay, when put in the mow, varies greatly in moisture content, which depends very much upon the weather when it is cured. In the dry climate of the West, hay is drier and shrinks less after storing. In the East, the hay is much wetter when stored and may shrink more, says Prof. Clinton D. Smith in the Country Gentleman.

At the Kansas station, in 1888, thirteen kinds of hay were put in muslin bags and buried in mows of similar kind of hay from four to six months. The shrinkage averaged 4.5 per cent, but ranged from 14 per cent loss to 3 per cent gain. At the Michigan station, June 27, 1896, five tons of very dry timothy were drawn from the field and, after weighing, placed in a separate mow in the barn. Later it was covered with wheat from harvest until the grain was thrashed in October. On the 26th of January following, the hay was reweighed and found to have lost 684 pounds, or nearly 7 per cent. Again, on the 6th of July, 1898, 5,600 pounds of timothy hay, just right to haul to the barn, was weighed in. It was weighed on the 18th of the next February, when it was found to have lost 776 pounds, or 13.8 per cent.

In the summer of 1887, C. B. Charles put 130.5 tons of timothy hay in good condition in the barn. He baled it in the January following, when he had 100.5 tons of bales and 1.5 tons of chaff, dirt and short hay. The hay was a little overripe; but here was a shrinkage of 21.7 per cent.

A hay dealer of large experience in Detroit writes: "Hay, from the time of putting in the mow until it is sold or baled out in the following winter, shrinks not far from 20 per cent."

In Utah timothy hay stored in the barn lost 15 per cent from July to April; when stacked, there was a gain of 1 per cent. In Missouri, in the stack there was a loss of 12.5 per cent in weight; in the barn the loss was but 7 per cent. So much for the losses on timothy.

When it comes to clover, the shrinkage depends altogether on the condition of the hay when stored. Wallace, in his book on clover, says that 100 pounds of green clover, well cured, will make 47 pounds of hay; if cut too early it will shrink much more. At the Michigan station 1,870 pounds of half-grown clover cured down to 418 pounds, or a little over 20 per cent of hay. Again, 4,691 pounds of green clover made 960 pounds of cured hay, or nearly 40 per cent of the original weight. It was reweighed the following November, showing a farther loss of 180 pounds, or 9 per cent of the weight put in the barn.

A writer in the Country Gentleman reports that 1,520 pounds of green clover made 680 pounds of hay. Remember that in New England and New York timothy hay carries on an average 12 per

cent water; clover hay, 14; and corn fodder, 25 per cent.

Now as to the shrinkage of the clover hay itself. We weighed 1,100 pounds of clover hay when hauling directly from the windrow, but dry. It was reweighed November 12 following, when it showed a loss of but 3.6 per cent. Again, on July 6, 5,763 pounds of mammoth clover hay, fairly well cured one day, kept in the heap over night and hauled to the barn at 9 a. m., was weighed out on the 18th of February following, showing a shrinkage of 11.2 per cent.

At the Pennsylvania station, grass cut when nearly ripe weighed when cured and put in the barn 11 per cent more than hay from an equal area cut when in blossom, but the early-cut hay lost 29 per cent and the late-cut hay but 21.5 per cent.

BARLEY AND MALT

Charles E. Glafke of San Francisco, Cal., has been granted United States letters patent No. 774,915 on a malt kiln.

The Frank Jones Brewing Co.'s malthouse at Portsmouth, N. H., was burned on November 17, causing a loss of \$150,000.

Plans have been prepared for the erection of a 100,000-bushel elevator at Thirty-ninth Street and Emerald Avenue, Chicago, for the Manhattan Brewing Co.

The directors of the American Malting Co. have chosen the following officers for the coming year: President, Charles A. Stadler; vice-president, John G. Jenkins; treasurer, Louis E. Stanton; secretary, John C. McCune, and general superintendent, Seymour Scott.

Henry Reifel, manager of the Union Brewing Co. of Nanaimo, B. C., has made a proposition to the farmers of that section of British Columbia that if they will grow sufficient barley to supply the needs of the plant the company will erect a malting plant there to cost \$10,000. The barley of that section is said to be excellent for malting purposes.

Certain farmers in western New York have organized to control or at least to manipulate the barley market at Rochester. They have made an arrangement with A. E. Gates of Rochester to ship to him their barley, have it graded, stored, insured and loaded, at the rate of half a cent per bushel. Farmers who have not sufficient quantity for individual shipment are privileged to have the grain stored until a carload of the same grade shall have been accumulated. Then the grain will be loaded and turned over to the owners for private shipment, as they see fit. They expect to hold for 44c for No. 3.

A Minneapolis dispatch, dated December 7, says: "For the first time in the history of the grain trade a shipment of barley has been consigned from Milwaukee to Minneapolis. The barley is of a high grade, grown in Eastern Wisconsin, and will be used for seed in Minnesota. Local barley dealers believe that if better seed is distributed in the state Minnesota will be able to take higher rank in the production of this cereal. The superiority of the barley grown in Eastern Wisconsin over that grown in Southern Minnesota is plainly shown in the relative prices the two varieties command in the Milwaukee market. The former sold yesterday at 52 cents a bushel and the latter at 43 cents a bushel. Local barley dealers believe that the soil of Minnesota is as well fitted to growing barley as that of Wisconsin. They have a theory that proper attention has never been given in Minnesota to the sowing of the right kind of seed. Acting on this theory, they have bought some of the Wisconsin grain, which will be used as seed in this state. Barley raising, in point of quantity, is an expanding form of agriculture in the Northwest and the Minneapolis market is annually growing as a receiving point. Last year the total receipts of barley at this market were 11,233,000 bushels, as against 7,195,000 bushels in 1902."

MUST REPAY DIVIDENDS.

Justice Clark, of the Supreme Court of New York, on November 29 awarded judgment for \$1,087,074.59 against Alexander M. Curtiss of Buffalo, and in favor of Archibald A. Hutchinson and other stockholders of the American Malting Co. This judgment represented dividends, said to have been declared and paid illegally, and suit was brought against Curtiss, individually and as a director of the company, under the stock corporation law, which makes every director of a corporation liable to the full amount of any dividend illegally declared.

Hutchinson charged, in his complaint, the American Malting Co. was organized in 1897, with \$30,000,

600 capital, one-half in 7 per cent preferred stock, and that the directors had paid eight quarterly dividends of \$1,855,000 on this preferred stock, out of the capital instead of out of the net profits, and Justice Clarke finds that this was true between July 15, 1898, and October 15, 1899, except for one dividend declared in April, 1899. The judgment represents the total dividends declared, and carries interest from dates of payment.

In the decision Justice Clarke says: "It does not seem to me that in these days of great corporations and of combinations into one of many corporations, it is asking too much of directors, fiduciary officers acting as they are, that they should obey the law of their incorporation and not bring their companies to the verge of bankruptcy and ruin by the payment of quarterly dividends on preferred stock out of capital instead of net earnings."

IMPORTS AND EXPORTS OF BARLEY AND MALT.

BARLEY.			
Imports—	Bushels.	Value.	
October, 1903	9,852	\$ 5,136	
October, 1904	13,559	5,795	
Ten mo. end. October, 1903....	17,597	9,126	
Ten mo. end. October, 1904....	52,094	25,265	
Exports—			
October, 1903	2,373,236	1,423,270	
October, 1904	1,242,033	698,931	
Ten mo. end. October, 1903....	7,160,390	4,152,959	
Ten mo. end. October, 1904....	4,838,134	2,716,835	

BARLEY MALT.

Exports—		
October, 1903	20,271	13,951
October, 1904	35,746	25,821
Ten mo. end. October, 1903....	311,801	227,834
Ten mo. end. October, 1904....	422,492	302,484

DECREASING PRODUCTION OF BARLEY IN THE EAST.

Barley is more or less important as a grain crop in some part of each of the Eastern states, from Maine to Virginia and West Virginia, and ever since official agricultural figures have existed, New York has been credited with something like two-thirds of the entire production of barley within this territory. With the exception of California, where barley is the staple grain for feeding, as corn is in Kansas, New York ranked first among the states in production of barley up to the census of 1880, the order in that year being California 12.5 million bushels, New York 7.8 millions, Wisconsin 5 millions, Iowa 4 millions. The next ten years saw important changes and the passing of Eastern barley from its pre-eminent position in the production of malt, for although the crop of New York was over eight million bushels, or greater than at any previous census, she ranked fifth on the list, while six other states, though ranking lower, were each producing over one million bushels. Now up to this point the Atlantic states north of North Carolina, taken as a whole, had just about held their own with New York, their total product constantly increasing, though relatively small. This region had produced, all told, in 1850, 4,197,944 bushels, and in 1890 9,652,302 bushels, an increase of over 129 per cent during 40 years, the end of which found the rival West in a safely dominant position in the market.

It is not likely that any considerable number of farmers noticed these official figures at the time, but the conditions which they recorded were evident to all who produced barley for the market, so note the figures for the next census taken ten years later, for the crop of 1899: For the region in question 3,949,781 bushels, a decrease of more than 59 per cent in ten years, and a shrinkage of 63 per cent in the acreage during the same period. This region, after a steady climb of forty years, dropped in ten years to a point below that at which the record begins, and what is true of the whole is true of New York in particular. Her drop from over 8 millions of bushels in 1890 to less than 3 millions in 1900 leaves her ranking eighth among the barley states, four other states having each a production of from six to eight times that of New York.

The decrease in Maine and Vermont has been slight, and the small totals of Maryland and Virginia are still steadily increasing. This goes to show that barley is retaining prominence as a grain crop only in regions where it can be produced more easily than corn, and where railway facilities are not such as to bring western grain into local competition with it.—W. A. Sherman in Country Gentleman.

The attorney-general of Washington, ruling on a consignment of oats sent from Minnesota to Tacoma dealers for transshipment to Manila, holds that grain shipped from an outside state to dealers in Washington is subject to inspection under the grain inspection laws of that state. It is immaterial whether such grain is inspected under the laws of another state before it reaches Washington.

OBITUARY

William Clark, a Chicago grain inspector, was caught between two grain cars in the Chicago, Milwaukee & St. Paul yards at Goose Island on November 16 and so badly crushed that he died a short time later.

John S. Kennedy, a grain, coal and feed dealer of Stafford, Kan., committed suicide in a hotel at Kansas City, Mo., on November 26. Poor health and heavy financial losses due to bad investments are said to have been the causes of his act.

J. H. Clark died at Orange, Mass., on November 21, aged 85 years. He was for many years engaged in the manufacture of woodenware in that city. In 1860 he engaged in the grain and feed business, continuing in that line for nearly thirty-five years.

Joseph B. Robinson, a wholesale hay and feed dealer of Brooklyn, N. Y., died at his residence in that city on November 22 after a year's illness. Mr. Robinson was born in the Borough of Brooklyn in 1841 and had lived there all his life. Three sons and three daughters survive him.

Henry W. Moyer, a well-known member of the Philadelphia Commercial Exchange and senior partner in the grain firm of Moyer & Matron at West Point, Pa., died at his home in North Wales, Pa., on November 30. Mr. Moyer was 63 years of age and leaves a widow, one son and a daughter.

Richard W. Noel, a grain inspector, died at the Red Cross Hospital in Kansas City, Mo., on November 17, from pneumonia fever. He was 65 years old and had filled the position he occupied for twenty years. He was well known among Kansas City Board of Trade men. A son and a daughter survive him.

William T. Radford, 66 years old, the father of J. W. Radford, chief grain inspector of Kansas, died of pneumonia on November 23 at his home in Kansas City, Kan. The deceased was a veteran of the Civil War and had lived in Kansas City for seventeen years. His widow, four sons and two daughters survive him.

R. P. Imrie, one of the largest Canadian hay exporters, and a member of the Montreal Board of Trade, died suddenly at Liverpool, England, on November 13. While Mr. Imrie had been prominently identified with the hay trade for a number of years he was a comparatively young man, being only twenty-five years old at the time of his death.

Samuel Ingersoll, a well-known hay and grain man of New York City, died on November 10 of appendicitis. Mr. Ingersoll was vice-president of the Horace Ingersoll Co. and a prominent member of the New York Produce Exchange. He was a member of both the hay and law committees of the Exchange at the time of his death. Mr. Ingersoll leaves a wife and one son, Herbert Ingersoll.

A. J. Wolfe, for many years engaged in the grain and produce business at Fremont, Ohio, died on November 28, aged 62 years. The deceased was born in Union County, Pa., and removed with his parents to Sandusky County, Ohio, when a year old. Mr. Wolfe platted and laid out the town of Lindsey, Ohio. He was a prominent member of the Masonic fraternity and the Sandusky County Pioneers' Association.

Oliver Jay died at his home in St. Marys, Ohio, on November 23, aged 60 years. He was operated upon for a cancerous tumor on August 15, and never fully recovered. Mr. Jay became a resident of St. Marys in 1867 and engaged in the linseed oil business, continuing in this line until 1897. In 1886 he and his brother formed the Jay Grain Co. The business has grown to such an extent that the company now operates elevators at nearly every station on the L. E. & W. R. R. west of St. Marys.

Jacob M. Stouffer, a grain dealer of Gibson City, Ill., and local representative of the Shellabarger Elevator Co. of Decatur, died on November 15 as the result of injuries received the day previous at the elevator. Mr. Stouffer was attempting to start a clogged chute to a corn sheller, using his left foot to start the grain. The choke gave way suddenly and Mr. Stouffer was drawn into the sheller, and before it could be stopped his leg was crushed so badly that amputation was necessary. The reaction and shock following the accident and operation proved fatal, his death occurring less than a day later. The deceased was a well-known citizen of Gibson City, and he held the office of city clerk at the time of his death. He was born at Chambersburg, Pa., in 1867 and came

to Illinois about fifteen years ago. His wife, to whom he was married in 1890, and four children survive him.

Percy F. Lucas, member of the Kansas City Board of Trade, died at the German Hospital in that city on November 23, from the shock of an operation for appendicitis. The deceased was 40 years of age and leaves a widow. Mr. Lucas was a native of Manfield, Mass., and became a resident of Kansas City in 1887. He was employed for several years by the Peavey Grain Company of Minneapolis. In 1893 he entered into partnership with W. C. Goffe and George S. Carkener, forming the grain commission firm of Goffe, Lucas & Carkener.

Louis Lemcke, a well-known grain commission man of St. Louis, Mo., died suddenly on November 12. He was taken ill while riding on a street car and was carried into a drug store, where he died a few minutes later. Mr. Lemcke was born seventy-three years ago in Bremen, Germany. He went directly to St. Louis from the fatherland about fifty-four years ago, and has been in the grain commission business ever since. He dealt in barley exclusively. The deceased was unmarried and made his home with a widowed sister-in-law.

James Duane Viets, of the S. D. Viets Co., wholesale grain and hay dealers at Springfield, Mass., died suddenly at his home in that city on November 13. His death was due to heart failure. The deceased was 51 years of age and was born in East Granby, Conn. For a number of years he was engaged in the hay and grain business at West Granby, that state. He became a resident of Springfield, Mass., about eleven years ago, and with his brother, S. D. Viets, engaged in the wholesale hay and grain trade. He is survived by his wife, a daughter and two brothers.

Horace Ingersoll, head of the Horace Ingersoll Co., grain and hay dealers of New York City, died at his residence in that city on November 14, just four days later than his son Samuel, the vice-president and treasurer of the company. The funeral of the latter had not been held when his father died, without knowledge of his son's death. The late Horace Ingersoll was the oldest member of the New York Produce Exchange, with one exception, having become a member in 1855. He was in his 75th year and his death was due to paralysis, occurring after a long illness. He is survived by his widow, a daughter and two sons.

John B. Hunt, a pioneer of Northern Illinois, died at Galesburg, this state, on November 14, of paralysis. The deceased was born near Greenville, Ill., in 1820, and when twelve years of age removed with his parents to a farm near Industry, Ill. They moved to Burlington, Iowa, in 1836, and resided there for a number of years. In 1850 Mr. Hunt was one of a party of goldseekers that made the overland trip to California. He moved to Bushnell, Ill., in 1856 and engaged in the grain and lumber business. In 1864 he moved to Galesburg, where he has since resided. One son, two daughters, a brother and two sisters survive him.

Lucius L. Brigham, formerly a prominent grain dealer of Worcester, Mass., died suddenly on November 25, of heart failure. Mr. Brigham was taken ill while riding home on a street car and stopped off at a drug store, where he obtained some medicine. He was then taken to his residence in a carriage, dying about five minutes after reaching home. The deceased was born in Wayland, Mass., in 1832. He first engaged in business for himself at Westboro, Mass., when nineteen years of age. In 1854 he removed to Worcester. In 1884 he engaged in the grain business and followed this line until 1901, when he retired. He leaves a wife and three children.

George Alfred Seaverns, a pioneer grain and real estate dealer of Chicago, died on November 20 at the family residence, after a prolonged illness. Mr. Seaverns was one of the oldest handlers of grain and real estate in this city, having been engaged in the business since 1855. He was born in 1833 in Boston and came to Chicago in 1853. He entered the office of Gurden S. Hubbard & Co., packers, in the same year, and two years later branched out for himself as a grain and real estate dealer. He was continuously active in this business until three years ago, when he retired. He was the first man in the West to engage in the expert cleaning and mixing of grain to raise its grade. He made a fortune at it before the trade in general became aware that it was one of the most profitable methods of operating in grain. Until his retirement from business Mr. Seaverns was president of the Seaverns Elevator Co. This company, with the Armour interests, at one time practically controlled the elevator business of the West. Mr. Seaverns joined the Chicago Board of Trade in 1856, and was a member of it until his retirement from business. He was also a member of the Chicago Club and of St. Paul's

Universalist Church. He is survived by a widow, a son, George A. Seaverns Jr., and two daughters. He leaves a fortune estimated at \$5,000,000.

William P. Leshner, one of the oldest and best-known members of the Philadelphia Commercial Exchange, died at his home in that city on November 22, after a lingering illness. He was born on the family farm in Huntingdon Valley, Montgomery County, Pa., in 1838, and spent his early days there. Ever since he attained manhood he has been identified with the commercial interests of Philadelphia and the state. He was one of the oldest members of the Pennsylvania State Millers' Association, a director of the Merchants' and Salesmen's Association of Philadelphia, a member of the Commercial Exchange and one of the founders of the Pennsylvania Millers' Mutual Fire Insurance Co.

Col. William A. Tower, head of the Boston banking and brokerage firm of Tower, Giddings & Co., and formerly a member of the flour and grain firm of Tower, Davis & Co., died at his home in Lexington, Mass., on November 21. He was born in Petersham, Mass., in 1824. In 1850 he engaged in the grain and flour business in Boston as a member of the firm of Rice, Tower & Co. Two years later he became the head of the firm of Tower, Davis & Co. This is said to have been the first Boston firm to establish direct connections with Western grain dealers. Several years later Mr. Tower, in partnership with George Watson of Chicago, formed the banking firm of Watson, Tower & Co. in that city. In 1865 Mr. Tower disposed of his interest in the banking business in Chicago and the flour and grain business in Boston and established the banking firm of Tower, Giddings & Co. He was also interested in a number of other banking, railway and life insurance companies in the East. Mr. Tower is survived by his wife, one son and a daughter.

CARE OF A GAS ENGINE.

Probably the majority of engine owners and users realize the necessity of cleanliness about the gas engine. The engine should be cleaned and examined immediately after stopping, and allowed to cool down gradually.

Special attention should be paid to the piping, to see that it is properly arranged and all leaks prevented. Cold water should run through the water jacket in a steady stream; but where this is not practicable, the circulating tank and pipes must be large enough for good circulation through the jacket.

Gasoline should be stored underground, outside of the building.

Great care should be taken to prevent leakage in the gasoline feed pipe, special attention being paid to all joints, which should be made tight without the use of red or white lead. As the exhaust pipe conveys heated gases, it should be well protected from inflammable material by the use of some non-combustible substance.

For a small stationary engine a cheap but effective muffler may be made of a piece of sewer pipe about ten inches in diameter and two feet long, set in the ground just outside the wall of the engine room. The exhaust pipe of the engine enters the muffler through a wooden cover, which is perforated with a number of 1/2-inch holes. A branch is led off from the exhaust pipe, and opens into the air, a valve being inserted near the junction of this pipe with the exhaust pipe. This pipe is for the purpose of relieving the cylinder of back pressure at the time of starting up, and also in case the holes in the muffler cover become closed with snow or ice between the times of shutting down and starting up. After a few explosions, the relief valve is closed. This muffler has been found to suppress almost completely the sound of the exhaust.

The igniter, which is an important part of the internal combustion engine, must be well cared for. If it is of the wipe-spark style, the points will wear longer if the polarity of the current is changed from day to day, which can easily be accomplished by means of a double-throw switch, which may also be used for the main switch. For this type of igniter, storage batteries are, in many cases, too powerful, a small magneto giving better results, but it is a good plan to have two sources of current. The quality of gasoline is an important factor, and it is essential that it should be free from water, grit, etc. In the examination of the engine, which should be made before starting up and after shutting down, special attention must be paid to the governor, to see that it is in good order. All nuts and screws must be tight, and the engine fastened to a solid foundation. Always keep the engine in perfect order, and there is no reason why the internal combustion engine should not give perfect satisfaction. Nine times out of ten, unsuccessful results are due to mismanagement and neglect.—Technical World.

FIRES--CASUALTIES

The Rice Elevator at West Hope, N. D., was burned, together with its contents, 20,000 bushels of wheat, on December 4.

The Western Elevator Co.'s elevator at Oto, Iowa, was burned to the ground at an early hour on the morning of November 27. It will be rebuilt.

Walter S. Hart's elevator at Allen, Neb., caught fire recently from some burning rubbish, but the blaze was extinguished before much damage resulted.

Ewell & Jones' grain store at Seymour, Texas, burned on November 22. There was \$1,000 insurance on the building and the loss on its contents is said to be covered by insurance.

P. J. Shea, manager of the Northern Grain Co.'s elevators at Manitowoc, Wis., was seriously injured on December 3 by the breaking of the coupling between two cars which he was helping to move.

J. Coffey, an employe of the Wellington Milling and Elevator Co. at Wellington, Kan., was injured on November 15 by being knocked off the top of a wheat car while attempting to release the brake.

V. R. Bartlett's elevator at Winfield, Kan., was partially destroyed by fire of unknown origin on the night of November 26. The elevator contained 5,000 bushels of wheat. Spontaneous combustion is thought to have caused the fire.

F. M. Campbell's elevator at Randolph, Iowa, was burned between 5 and 6 o'clock a. m., November 22. A quantity of wheat and corn was destroyed. The loss is estimated at \$9,000, with \$3,000 insurance. The elevator will be rebuilt.

The breaking of a rod in D. W. Alton's elevator at Berwick, N. D., on November 11, caused one of the flax bins to spring a leak and allow a quantity of the grain to run out. The accident was caused by overtaxing the capacity of the house.

The feed mill and elevator of the City Grain and Feed Co. at Columbia, Tenn., were destroyed by fire on December 11, together with thirty cars of ear corn and between 40,000 and 50,000 bushels of shelled corn and oats. Loss, \$73,000; insurance, \$42,000.

The second attempt to burn the elevator and warehouse of S. W. Edwards & Son, wholesale and retail grain, hay and feed dealers at 110-120 North Elizabeth Street, Chicago, within the last few months was made recently. The fire was discovered and extinguished by employes of the firm.

George Little, of the firm of Finnegan & Little, grain and feed dealers at South Manchester, Conn., was buried beneath a pile of bags of grain while piling them up in the warehouse on November 14. He had about finished the job when the bags toppled over, pinning him to the floor. His injuries were not serious.

The Dominion Elevator Co.'s elevator at Poplar Point, Man., was burned to the ground on November 22. The fire broke out at 6 o'clock p. m. The elevator was an old one, having been erected fifteen years ago. It contained about 600 bushels of wheat at the time of the fire. The loss is practically covered by insurance.

C. E. Williams met with a painful accident in the Shellbarger Mill and Elevator Co.'s plant at Salina, Kan., on the night of November 10. He was ascending a ladder when the light he was carrying became extinguished and he lost his footing and fell. Both his ankles were sprained and he received other painful injuries.

The W. H. Walker Milling Co.'s 115-barrel flour mill, grain elevator and flour warehouse at Alden, Minn., were burned at 2 o'clock a. m., November 18. The fire started in the upper part of the mill building. About 4,000 bushels of wheat and two carloads of flour were destroyed. The loss is \$18,000, with insurance of about \$12,584.

The 24-horsepower gasoline engine in Charles P. Washburn's elevator at Middleboro, Mass., was wrecked on December 3. In some manner the piston rod became loosened and on whirling around struck the flywheel, which was shattered, pieces flying in all directions. The remainder of the engine was so badly damaged as to be almost a total wreck.

The third floor of the building at Evansville, Ind., occupied by the W. H. Small Grain and Seed Co., on November 23, weighted down by heavy grain, gave way, carrying with it the second. Before anyone in the office had warning the debris crashed upon them. W. H. Small, president of the company, two clerks and two young lady stenographers were buried beneath the wreck, but all crawled to safety through the broken doors and windows of the first floor, while two men, who were working on the third floor when the crash came, escaped by slid-

ing down the elevator cable. The principal loss is the damage to the building. Very little grain or seed was lost.

A. J. Cooper's elevator at Goderich, Ont., together with several thousand bushels of grain, was destroyed by fire, which broke out at 9:15 o'clock a. m., on November 26. The fire started in the engine room, which contained a gasoline engine. There was \$2,000 insurance on the building, and the loss on the grain is said to have been covered by insurance.

The grain elevator at Vanwood, Ill., owned by W. H. Council of Williamsville, Ill., was destroyed by fire at 6 o'clock p. m., on December 7, together with about 7,000 bushels of corn. The loss on the building is estimated at \$5,000 and the loss on the grain at about \$2,800. There was \$5,000 insurance on the property. A hot journal is supposed to have caused the fire.

Charles A. Samuelson's grain elevator at Sherard, Ill., was destroyed by fire on November 29. The elevator stood alongside the tracks of the Mercer County branch of the Rock Island Railway and the fire is thought to have been caused by sparks from a passing engine. The elevator contained about 1,000 bushels of grain and three tons of hay. The loss is about \$2,000.

Five Italian railway laborers perished in a fire on the night of November 23, which destroyed the old Noble Warehouse at North Bend, Pa., used as a lodging. The fire was started by one of the laborers washing a pair of overalls in a pail of gasoline. A spark from his pipe fell into the pail, causing an explosion. The burned building had not been used for the storage of grain for some time.

S. S. Renfrew, proprietor of an elevator at Harvey, N. D., came very near losing his life in a wheat bin on December 5. He had descended into the bin for some purpose and the suction of the running grain drew him down until only his head was above the grain. His cries for help were heard by two of his employes. They shut down the machinery and rescued him from his perilous position.

The elevator at Bonair, Iowa, had a narrow escape from destruction by fire recently. George Rathert, an employe of the elevator, struck a match in the engine room to start the gasoline engine. The flames set fire to the gas which had escaped from the engine and started a blaze which threatened to spread to the elevator. The fire was confined to the engine room and the damage is slight.

A grain warehouse in St. Louis, Mo., owned by F. W. Goeke, was partially destroyed by fire on the night of November 27. The loss on the building is reported at \$20,000, and the contents at \$40,000, covered by insurance. The origin of the fire is unknown. The warehouse is a metal clad structure and is located at St. George and Sidney streets near the yards of the Iron Mountain Railway.

The elevator at Washburn, N. D., owned by Gen. W. D. Washburn, was completely destroyed by fire on the morning of December 3. The fire was discovered at 2 o'clock a. m., and at that time it had gained so much headway that the building and its contents, 6,000 bushels of wheat, were past saving. Four cars loaded with wheat on a nearby side-track were also destroyed. The elevator had a capacity of 50,000 bushels and stood on the river bank. The loss is estimated at about \$40,000.

The grain elevator at Remington, Ind., owned by McCray, Morrison & Co., was destroyed by fire supposed to have been set by sparks from a passing locomotive on November 25. The elevator was built by Hathaway Bros. in 1871 and rebuilt by Hanley Bros. in 1895. It was of frame construction, three stories high, and had a capacity of 60,000 bushels. Since 1899 it had been used as a storage house, but at the time of the fire contained no grain. The loss is \$5,000, with no insurance.

Fire which started in the east part of J. T. Rawleigh & Co.'s hay and grain warehouse at West Monroe and Green streets, Chicago, on December 2, almost destroyed the structure and caused damage estimated at \$10,000. The fire is thought to have been of incendiary origin. An attempt to blow open the safe in the firm's office was made a day or two previous and four men are under arrest charged with the crime. The friends of these men are supposed to have fired the warehouse for revenge.

Fire destroyed the grain elevator of the South St. Paul Stock Yards Co. at South St. Paul, Minn., on November 27. The elevator is a total loss, and the power and pump house are badly damaged. The damage is estimated by Gen. M. D. Flower of the stock yards company at \$26,000 covered by \$25,000 insurance. The fire was discovered about 6:30 o'clock a. m. and was under control by 8 o'clock, although the hay and grain in the elevator burned for several hours later. The fire, it is supposed, started from spontaneous combustion of grain stored in the top of the elevator. Other reports say it started in the hay stored in the lower part of the elevator and had burned its way to the

grain in the top before it was noticed. The elevator was owned by the stock yards company and is valued at \$20,000. It was well filled with grain, feed and hay, belonging to the company and to the South St. Paul Grain Co.

A large grain and feed warehouse in Knoxville, Tenn., owned by the H. T. Hackney Co., was practically destroyed by fire on the evening of December 4. The building was a frame structure and contained several carloads of hay and a large quantity of grain and feed. The fire started in the portion of the warehouse where the hay was stored and is supposed to have caught from a spark from a passing engine. Of the grain stored in the warehouse a large portion was saved. The loss is estimated at about \$18,000, with insurance to the amount of \$8,000 on the building and contents.

An attempt to burn Thomas A. Brown's grain elevator at Lewiston, Ill., was made at an early hour on the morning of November 30. The fire bug, Perry Goforth, was caught in the act of applying a match to a bunch of waste placed under the building and placed under arrest. Mr. Brown's suspicions were aroused a few days previous by the unusual amount of waste taken from car wheel axles which was lying around the outside of the elevator. He placed private watchmen about the building and one of these made the capture. The man Goforth was arrested some months ago on the charge of firing the flour mill at Lewiston, but was acquitted on account of a flaw in the testimony when his case came up for trial.

The Buchanan Elevator Co.'s elevator at Buchanan, N. D., had a narrow escape from destruction by fire on November 28. A couple of men went to the top of the elevator and while up there one of the party struck a match to light his cigar and threw the remainder of the match on the floor, which was covered about an inch thick with dust. Shortly after smoke was detected in the elevator, but could not be located. A few hours after the men were in the top of the elevator one of the employees had occasion to go to the top of the building and discovered the fire on the second floor. It had burned through the top floor and fell to the second. The dust had kept the floor from blazing, so the fire was easily extinguished.

The two-masted schooner Spademan was ice bound for several days recently about two miles below the mouth of the Thames River in Lake St. Clair. The Spademan was bound from Port Huron, Mich., to Chatham, Ont., with a cargo of 18,000 bushels of wheat. During the gale on December 2 she became unmanageable and broke away from the tug which was towing her. The wind drove her out of the channel and upon the bank, where solid ice five inches thick soon formed around her. The steamer Juno, also wheat laden, narrowly escaped a like fate and arrived at Windsor on December 5 in a leaking condition. She was also bound from Port Huron to Chatham, but was forced to turn back by the heavy ice at the mouth of the Thames River.

The South Texas Grain Co.'s large elevator at Houston, Texas, was destroyed by fire, together with its contents, on the morning of December 4, causing a loss of about \$100,000. The fire broke out at about 4:30 o'clock a. m. The origin of the fire is not known. Two night watchmen who slept on the second floor of the building were awakened by the heat and smoke and were forced to jump to the ground from an upper window, as escape from below was cut off by the flames. The burned building was 185x64 feet in dimensions and was valued, with its equipment, at about \$35,000. The elevator was erected a little over a year ago and was thoroughly modern. The grain, flour and feed stored in the elevator was valued at between \$65,000 and \$75,000. The company will rebuild the elevator and in the meantime will carry on its local business at a warehouse in another part of the city.

SUGGESTIONS TO GRAIN SHIPPERS.

Although the following article, prepared by H. A. Foss, Board of Trade Weighmaster, Chicago, has been mailed in circular form to all members of the Grain Dealers' National Association, yet it is of so much value that the editor believes it should be permanently preserved for future reference, and gives that as his excuse for here republishing what no doubt most of the readers of the "American Elevator and Grain Trade" have already seen:

"I desire to call the attention of all grain shippers to the necessity of more care in the cooping of cars used for carrying grain and to offer a few suggestions which will be of material assistance in reducing leakage:

"During the month of August of this year the records of five terminal markets, viz., Chicago,

Kansas City, St. Louis, Minneapolis and Duluth, show that 10,419 cars of grain arrived in a leaking condition. Of these 3,867 were due to defective grain doors; the balance (6,552), with the exception of 563, which were spilling grain over the doors, were due to defective car bodies.

"The point over which the shipper has direct supervision is the grain door; therefore he is more to blame for leaks at that point than anyone else. There are also many other points at which frequent leakages occur, that cannot be entirely remedied by the shipper, but he can make temporary repairs that will be of much value to him in avoiding loss of his grain while in transit.

"It is decidedly cheaper for the shipper to spend a little extra time and money in hunting for weak spots and in precautionary efforts to prevent leakage than to depend upon the railroads making good any loss. For if he does not do this and the cars become leaky, the leakage may be stopped and the cars repaired before they arrive at the unloading points, making it difficult to establish the fact of leakage; and even with that fact established, the process of adjusting even good claims is slow and uncertain. Then, again, the shippers may not have weighed their grain, thereby precluding any hope of recovery. One extensive shipper recently said: 'I rarely suffer loss through leakage in transit, for the reason that I do not load my cars unless I am sure they will not leak, even if it costs me several dollars to put them in that condition. It is far cheaper for me to spend this amount of money, if necessary, and the extra time than it is to run chances.' Our investigation has proven this to be the experience of many other careful shippers, and if you will follow the suggestions given here, I feel sure that many grievances will be prevented.

"The points to be inspected in a car, arranged in order of their greatest importance as determined by leakages, are as follows: First, the grain doors; second, the sheathings; third, end doors and windows; fourth, linings, and, fifth, floors.

"Be sure that your grain doors are strong enough. A safe plan is to make them stronger than you deem necessary. They should be well braced and all braces should be nailed to each and every board. It is poor economy to scant this bracing. Where a vertical center brace is used, put a cleat on the floor at the bottom, if possible. The best and safest door I know of is made by placing two ordinary grain doors with the flat sides together. The object in placing the flat sides together is to prevent grain from lodging between them. Under no circumstances should a door too short for the opening be used. Spliced grain doors are most unsatisfactory and uncertain.

"Patent doors, having effective lugs at the bottom and other proper fastenings, should not be nailed to the door posts. When nailing is necessary, never use spikes, as spikes cause the mutilation of the door when opened at the unloading point. To be sure, such mutilation may never affect the shipper who spiked the door, but the next shipper will suffer. Each and every shipper will some day be the 'next shipper!' Furthermore, such treatment will discourage all efforts towards a perfect grain door. Therefore, never spike a patent door.

"Single boards should be used for the top of the grain door in order that one board may be knocked off by the grain inspector without loosening others and causing leakage. The jarring and jolting of cars in switching will level the grain in them; therefore, the doors and windows should be boarded above the leveling point.

"For guidance in the installation of the reinforced grain door used by the C. B. & Q. Ry. we would advise that the additional thickness or bracing be placed on the inside, as the door in this position has more retaining power. The sections should all face the same way, otherwise one section may bulge more than the others, allowing leakage between.

"Next in importance are the sheathings. Both the side and end sheathings should be examined after the cars are loaded, and any that are loose or bulged should be securely nailed. The racking of the car in rounding curves will surely spring weak sheathings and allow the escape of grain, which the linings will not prevent. Leakages at sheathings are not readily detected unless the cars are in motion.

"End doors which extend to the floor are a source of many leaks and should therefore receive a careful examination, and if cooping be necessary, it should be on the inside of the car. A grain door set on end will afford good protection. Always lock or cleat the end windows on the inside and do not neglect to board them high enough.

"The linings of cars should also receive careful attention on the part of the loader, as grain lodging behind them frequently amounts to several hundred pounds and is often lost to the shipper. A careful cooper will pay particular attention to this point.

"In addition to the above, special attention is directed to the floors, more particularly when

small grains, such as flax, rye and wheat, are to be loaded.

"This department hopes for the co-operation of every shipper towards the betterment of the grain car equipment and suggestions along this line will be gladly received."

TRANSPORTATION

The new line of the Soo from Minneapolis to Winnipeg was opened on November 21.

The Texas Railroad Commission has issued a notice for a hearing on January 17 to consider a revision of the tariff on shipments of grain, flour, hay, etc., in the state. A number of reductions are proposed.

Up to the first of the month no wheat had been placed at Duluth for winter storage in boats, although contracts had been made for considerable flax. Some wheat has been placed for winter storage, to be loaded at Port Arthur.

The Chicago, Milwaukee & St. Paul Railroad has put into effect a new ruling which requires Chicago consignees to fully unload cars of hay and straw within 96 hours after the cars are placed on the team track under penalty of having the consignments sold for account of whom it may concern.

There was a rush to get grain out of the terminal elevators at Duluth before the close of navigation on December 5. It is estimated that 2,800,000 bushels of flax, 1,500,000 bushels of wheat, 400,000 bushels of barley and 300,000 bushels of oats were loaded out in the days from December 2 to 5, inclusive. The wheat rate was 2¼ cents to Buffalo.

Much of the grain traffic from American upper lake ports which formerly went by lake to Buffalo and was then exported from American points has, during the past season, been diverted to the St. Lawrence route. The Great Lakes & St. Lawrence Transportation Company has carried 370,000 barrels of flour and over 2,000,000 bushels of wheat this season.

Inability to secure cars is causing Portland grain dealers to again consider the feasibility of shipping wheat to Eastern markets by the all-water route. It was announced recently that 15,000,000 bushels of wheat had been purchased in Oregon, Washington and Idaho for shipment to Eastern markets, and that only a small portion of the grain had gone forward.

The abolition of the milling-in-transit privilege, recently effected by the Maine Central Railroad, places Rockland grain dealers in a more favorable position than heretofore. While Rockland has had the bulk of the wholesale grain trade of Penobscot Bay in past years, under the new plan it is more than probable that it will receive even a larger amount than before.

The shipping business from American ports to Europe has shown a marked improvement during the past month. An increasingly active demand for grain accommodations on the regular steamers was the first sign of improved conditions, and rates for this class of cargo have in many instances advanced 100 per cent from the merely nominal figures previously current.

Although the advanced rates on grain from Chicago to Atlantic ports became effective on new business December 5, there is nevertheless a large quantity of corn actually or nominally in transit that will continue to go forward for some time. It is indicated that the movement of corn during this month is simply a question of car capacity on both Western and Eastern roads.

An effort is being made to establish an all-rail grain rate from Winnipeg to Montreal over the lines of the C. P. R. It is the expectation to secure a rate which will put Manitoba wheat on an export basis during the winter months. Winnipeg advices say that despite the fact that a tremendous amount of grain has been sent east this fall there is still a large quantity in store in country elevators and in the farmers' hands. The terminal elevators will not hold all of this, and to prevent congestion, an attempt will be made to forward a percentage of the overflow during the winter.

The transportation committee of the Minneapolis Chamber of Commerce is trying to secure a readjustment of coarse grain rates which will make it possible for Minneapolis dealers in oats to make shipments to New York and surrounding territory. It is possible for Minneapolis dealers to ship oats to points in southern New England by the Great Lakes, and when navigation is closed, by way of the Soo and the Canadian Pacific and the Grand Trunk lines. Territory farther south cannot be entered, however, as the rates preclude the transaction of business at the prevailing market prices.

PERSONAL

Milton Cole succeeds F. L. Marcellus as agent for the Zorn Grain Co. at Downs, Ill.

Oscar Ramstad has taken a position in the Andrews & Gage Elevator at Detroit, Minn.

L. C. Brunk, a grain dealer of Topeka, Kan., was struck by a carriage recently and seriously injured.

O. J. Adkin has succeeded Charles Fuller as manager of De Laney Bros.' elevator at Des Lacs, N. D.

G. A. Blackstone has resigned as manager of the Holmquist Grain and Lumber Co.'s elevator at Craig, Neb.

C. N. Edwards has resigned as treasurer of the Alliance Elevator and Milling Company of Sherburn, Minn.

Axel Erickson has accepted a position with the Holmquist Grain and Lumber Co. in its elevator at Craig, Neb.

William La Croix of St. Peter, Minn., has accepted the position of manager of the Walter Bowman Elevator Co.

Chris Halsa of Warren, Minn., has taken charge of the St. Anthony & Dakota Elevator Co.'s house at Donaldson, Minn.

R. C. Johnson has resigned his position with the Northwestern Elevator Co. at De Graff, Minn., and is succeeded by William Ryan.

H. O. Silvers has resigned as manager of the Berne Grain and Hay Co.'s elevator at La Grange, Ind. He will be succeeded by Amos Zahr of Berne, Ind.

Bruno Reinholdt, manager of Bartlett, Frazier & Carrington's grain business at Emden, Ill., and Miss Lena Kaesebier of that place were married on November 10.

A. L. Horner of Kumler, Ill., has moved to Bellflower, Ill., and taken charge of Bartlett, Frazier & Carrington's grain business, succeeding Mr. Bateman as agent.

William Luth, manager of the Steadman Elevator Co.'s house at Long Prairie, Minn., severely injured himself recently by heavy lifting and has been confined to his home.

W. W. Wilkerson is again in charge of the R. E. Jones Co.'s elevator at Cannon Falls, Minn. Mr. Reiter, who has been in charge of the house, has been transferred to Alma, Wis.

C. B. Tague, who has been manager for the Amenita Elevator Co. at Foxhome, Minn., has been transferred to a house in North Dakota. W. L. Potter succeeds him at Foxhome.

C. M. Snow, who has been manager of the Bemidji Elevator Co. of Bemidji, Minn., since it was organized, has sold his interest in the business and will be succeeded by H. C. Calvert of Fargo, N. D.

W. W. Granger and Dr. Alois Zechendorf, representing the Union Grain and Hay Co. and Fleischmann & Co. of Cincinnati, Ohio, have been making a tour of the West investigating grain conditions.

W. E. Mereness Jr. has resigned as assistant cashier of the Citizens' State Bank at Goldfield, Iowa, and removed to Des Moines, Iowa, where he has taken the position of traveling auditor for the Northern Grain Co.

H. D. Swan of Alden, Minn., who has been in charge of the elevator at that place owned by his brother, G. A. Swan of Minneapolis, has taken charge of the Swan Elevator at Albert Lea, Minn., succeeding Melvin Finton, as manager. Charles Rhines will take charge of the house at Alden.

John S. Aker has resigned as agent for the Andrews & Gage Elevator Co. at Esmond, N. D., to take up his duties as county sheriff, to which he was recently elected. George Smith of Lidgerwood, N. D., who has been in charge of the company's house at Oberon, N. D., succeeds Mr. Aker at Esmond.

Bert Miller, a prominent grain dealer of Frankfort, Ind., who resides there and operates an elevator at Avery, Ind., was assaulted and robbed while driving between the two towns on the night of November 23. The robbers knocked Mr. Miller senseless and took his pocketbook containing \$180 and some valuable papers.

Ernesto Stricker of Buenos Ayres, Argentina, who is largely interested in the milling and grain business of that country, has been visiting Buffalo, Duluth and other points along the Great Lakes for the purpose of securing ideas and information relative to the methods of handling grain in this country. The interests which Mr. Stricker represents are contemplating erecting a large number of grain elevators in Argentina. He has also visited several

of the principal milling centers of the United States and studied American milling methods.

H. C. Williams has resigned as agent for the Farmers' Elevator Co. at Colgate, N. D., to take a position with the Imperial Elevator Co.

HISTORY OF THE BILL OF LADING MOVEMENT.

The traffic management of a large firm in Chicago is credited with the following newspaper interview relative to the history of the uniform bill of lading and the efforts to bring about its adoption and enforcement and the alleged unfairness of features that are opposed by shippers, with some suggestions as to why it should be sternly fought:

About ten years ago roads, members of the Official Classification Committee, adopted a bill of lading called the uniform bill of lading and had it printed in the Official Classification as a part of the rules of that book, as the bill of lading to be used by railroads adopting the Official Classification. In a few places this bill of lading was insisted upon, but, generally speaking, it was not. Roads carried freight and paid claims for damages, and so forth, based on the common law of the land, the provision of the bill of lading being virtually ignored.

This year, however, a movement was set on foot to enforce the conditions of the bill of lading, which have been printed in the Official Classification, with the additions of others. In order to enforce these conditions, the attorneys of the railroads told them that they must have the shippers agree to the conditions in writing; in other words, sign the bill of lading, agreeing to the conditions, or they would not be binding, a provision being inserted that if they did not sign the bill of lading, but wished their freight carried as it had been, under what was termed a common law liability, their rates would be subject to an advance of 20 per cent. In other words, if they signed the bill of lading they would get the same old rate they had always had, but if they did not sign it they would be charged 20 per cent more.

This form of bill of lading has been adopted by the trunk lines which operate east of Buffalo and Pittsburgh. In October last, it was proposed to adopt the same bill of lading by all the lines in the western part of the United States. [This means, we understand, east of Mississippi River, only.—Editor "American Elevator and Grain Trade."] The Central Traffic Association—those lines operating in the territory between Buffalo, Pittsburgh and the Mississippi River—gave notice that they would insist on this form of bill of lading after October 1. The Manufacturers' Association of Chicago called a meeting of the various freight associations of shippers, to protest against the adoption of this bill of lading, and the meeting was held in Chicago early in July, which resulted in the formation of the American Shippers' Association.

Representatives attended this meeting from all over the United States. An executive committee was appointed with power to act, which stated that they would first take the matter up with the railroads and endeavor to persuade them not to put in effect the bill of lading proposed. A conference of the executive committee and railroad officials was held in Chicago, July 14. The matter was discussed by the Western roads at the Western classification meeting at Manitou, July 12, and they took no action regarding the adoption of this form of bill of lading. The lines in the Central Traffic Association, however, gave notice that the uniform bill of lading would be put in effect by them October 1, but that they would waive the signature feature until January 1, 1905. On that day it is proposed to insist upon the use of the uniform bill of lading. Later the movement to enforce the bill even after January 1 was abandoned by all roads west of Chicago.

There have been conditions in the bills of lading which, were it possible to enforce them, would not leave the shipper a single right in the world. Such conditions have been presented in the bills of lading for the last thirty years, and perhaps for the last ten years many of the same conditions have been printed in the official classification as those which shippers accepted.

Theoretically, these conditions have been in effect; practically, they have not. It must be borne in mind that the railroads in the last few years have ceased to permit the shippers to run them. Competition is being fast eliminated. Rates have been gradually advanced for the last ten years.

Tariff schedules have not been so largely increased, but the cost of transportation has been increased to a considerable extent by the withdrawal of commodity rates and by the changes in the classifications. The greatest advances in rates are caused by the withdrawal of certain concessions that nearly all shippers of any consequence have enjoyed. It is the opinion of the majority

of shippers that freight rates in the last ten years have advanced fully 25 per cent; in some cases as much as 50 per cent.

Railroad combinations have grown stronger. Mergers have been the order of the day, until today the railroads stand very close together and can take almost any action they see fit. They believe that all the federal legislation of any consequence was perpetrated by a railroad lobby, probably aided and abetted by a few malcontents connected with certain boards of trade. They have yet to find any shipper of consequence who ever had anything to do with having federal legislation enacted to regulate them. With the original interstate commerce law, an Illinois senator hoped to ride into the presidential chair. There is nothing whatever in the present interstate commerce law that protects the shipper. What few things there were, the railroads have gotten around by getting out of the way federal decisions.

Most of the railroads of the country have earned from 25 to 40 per cent for the last four years on actual values invested. The merchants of the country do not regret that they are doing so well and making money, but they believe that while the railroads are common carriers and a public utility, they should not take all of the meat in the coconut. A fair return on actual capital invested is always to be desired, but when they become oppressive with unfair conditions and high charges, they believe they should be regulated.

The long and short haul clause is virtually a nonentity to-day. The Interstate Commerce Commission has no powers and is afraid to act without the sanction of the railroads. Of late years neither political party has ever appointed a member of the Commission unless he was satisfactory to the railroad interests. The decisions of the Commission have been of value to no one except the railroads.

The sentiment is fast growing that the shippers should say to their representatives in Congress that they wish the whole law repealed. The Senate can be controlled by the railroad interests. Did you ever stop to count the number of railroad attorneys and officials who are senators of the United States? The railroad hold on the government is so strong that neither party will make a declaration against them in any way.

Of course they need their money politically. A recent appointment to the cabinet is very significant. It is quite apparent, that, taking into consideration all the facts, the general tendency of the railroads to advance the rates and to enforce rules and conditions that never have been enforced is simply being followed out in the adoption of the uniform bill of lading. It is evidently the intention of the transportation companies from now on to enforce the rules and regulations that have appeared in bills of lading. It goes without saying that in addition to all this they desire to advance their rates 20 per cent. This on top of the recent advances is enough to make all shippers rise up in protest.

The Texas Railroad Commission has promptly defined its attitude in response to numerous petitions for protection and relief. In a letter to J. Farley, manager of the Dallas Freight Bureau, they say:

"If this bill of lading is attempted to be enforced to the detriment and injury of the citizens and business interests of Texas, this Commission would then promptly take up and consider the advisability of promulgating an order reducing rates an amount which in their opinion offsets the discrimination or injustice that might be worked by the advance of 20 per cent in the rates as proposed in said bill of lading.

"Upon this question all the members of this Commission are agreed. We have no desire to be unjust, unfair or unreasonable to the common carriers of the state, but we do intend that they and the general public shall understand that injustice and wrong which may be perpetrated by reason of such contrivances as these will be met with promptness and firmness to the end that our people are fully protected, and we will use all the law at our disposal to afford this protection."—Railway and Engineering Review.

The Hamiota Grain Growers' Association has entered an action against the C. P. R. for violation of the Canadian grain act. The company, it is charged, supplied the Ogilvie Milling Company with a special train of fourteen cars to be loaded at their elevator at that point, while a large number of applicants' names appear on the car order book unfilled.

As Illinois farmers have found it difficult to get help to take care of their corn, Judge Keinbrough at Paris, on November 16, found it necessary to adjourn the November term of the Edgar Circuit Court, which convened that day, for two weeks, owing to the fact that the majority of the jurors, litigants and witnesses are farmers, who find it absolutely impossible to attend court.

FLAXSEED

The 1903-04 flaxseed crop of Argentine is estimated at 36,911,711 bushels of 56 pounds each. The total acreage is estimated at 3,134,602 acres.

Farmers in the vicinity of Chehalis, Wash., are making arrangements to raise flax. The proposed erection of a flax mill in the Chehalis Valley furnishes the inducement.

The Orange Judd Farmer estimates the flaxseed crop of 1904 at 22,190,000 bushels, the acreage at 2,275,000 acres, and the percentage at 9.8 bushels per acre. The same paper figures the 1903 crop at 26,639,000 bushels and the acreage at 3,159,000 acres.

It is estimated that country elevators at December 1 had about 3,000,000 bushels of flaxseed on hand and that there were, on that date, 1,500,000 bushels in transit, making a total of 17,500,000 bushels out of farmers' hands. Estimates of the amount marketed vary, some being as low as 65 per cent and others as high as 80 per cent.

October exports of flaxseed amounted to 20 bushels, valued at \$38, against 885 bushels, valued at \$1,024, for the preceding October. For the ten months ending with October the exports of flaxseed aggregated 25,809 bushels, valued at \$26,781, against 1,007,013 bushels, valued at \$1,161,971, for the corresponding period ending with the preceding October.

Imports of flaxseed for the month of October were 23 bushels, valued at \$50. No flaxseed was imported for the corresponding period last year. For the ten months ending with October, 289,089 bushels of flaxseed, valued at \$263,672, were imported, as compared with 13,389 bushels, valued at \$19,133, for the corresponding ten months ending with the preceding October.

The 1903 and 1904 flaxseed crops are summed up as follows in a recent issue of the Duluth Commercial Record: "In connection with the government estimate of 10.2 bushels per acre on flax, which Mr. McCollough, Chicago correspondent of Oil, Paint and Drug Reporter, figures to be a crop of 24,000,000 bushels, he states that last year's crop was 23,000,000 bushels after cutting out duplications. We are at a loss to figure out just how Mr. McCollough arrives at this figure. Taking the Northwestern receipts alone, Duluth 18,789,000 bushels, Minneapolis 8,224,000, a total of 27,013,000 bushels, presuming that the entire shipments out of Minneapolis, 3,468,000 bushels, came to Duluth, and we get, net, in the Northwest, 23,545,000 bushels. Chicago received 3,918,000 bushels, of which 2,300,000 bushels went from Duluth, leaving net Chicago receipts, other than Duluth and Minneapolis, of 1,618,000 bushels. The seed used by the American Co.'s mills at Sioux City, Des Moines and Kansas City, the Mound City and R. B. Brown at St. Louis, Goodrich at Milwaukee and Lyster at Fredonia, amounting to at least 1,500,000 bushels, are still to be accounted for. As a matter of fact, a fair proportion of this came from Minneapolis, but we sent all the Minneapolis shipments to Duluth, so will presume it came from the country. Adding these two items to the 23,545,000 bushels net Northwestern receipts and we have a grand total of 26,663,000 bushels, without the Pacific Coast. In addition to this was this year's seeding requirements, fully 1,500,000 bushels, but call it 1,337,000 bushels to make even figures, and we have a total crop of 28,000,000 bushels, still without the Pacific Coast. Another small item, not possible of determination, is the seed that went directly from the country to Goodrich, O'Brien at South Bend, Metzger at Toledo and Sherwin-Williams at Cleveland. Possibly this item would be small, but it amounted to something, and the probabilities are that, with the underestimate of 1,500,000 bushels for Milwaukee and Southwest and underestimate at Chicago (Chicago receipts were figured at 850 bushels to car and should be 900 or over), would account for another 1,000,000 bushels. But let it go at 28,000,000 bushels, and it does not appear that the government estimate of 27,000,000 bushels was much too high. Regarding the Commercial Record estimate of 22,233,000 bushels for the Northwest we can only say that in the eight years we have been estimating flax crops we have never made an overestimate. Have intentionally erred on the low side and have always said so. Last year and this year, both with decreasing areas, it was our desire and intention to overstate the decrease and keep the crop figures within limits that would prove good. Therefore, the 22,233,000 bushels represents the writer's idea that a million or so over would make no particular difference in anyone's plans, while a million less would materially affect everyone. Mr. McCollough and the trade in general need not have the slightest fear that this

year's crop will fail to reach the government indications of 24,000,000 bushels."

CORN IN BRITISH INDIA.

Indian corn, if we consider the whole of India collectively, is now of equal economic importance with wheat, says the Indian Agriculturist of Calcutta. In the hilly tracts of the country especially, and among the bulk of the aboriginal tribes, it is chiefly depended upon as a means of subsistence. Yet the botanist Roxburgh, writing about a hundred years ago, described it as "cultivated in various parts of India in gardens, and only as a delicacy, but not anywhere on the continent of India, so far as I can learn, as an extensive crop."

Its use in upper India may have been more general at that time than this writer was aware, for its most common vernacular name, makki, derived from Mecca, is supposed to associate its introduction with the Mogul dynasty. But there is no name for maize in Sanskrit, and the grain has no recognized place in the religious or social ceremonies of the Hindus. Few of those who cultivate it now have any idea that it is an innovation, and the fact that its local name is often that of some much older crop encourages the pious belief that it has been the staple food of the district for untold generations.

WEIGHT OF SEEDS PER BUSHEL.

The following list of seedsmen's customary weights per bushel of seeds, compiled by Professor Edgar Brown, botanist in charge of Seed Laboratory, has been published by the Department of Agriculture, in Bulletin No. 51, Part 5, Bureau of Plant Industry. The figures represent pounds per bushel:

Alfalfa, 60; amber cane, 45-60; bent grass, creeping 10-20, Rhode Island, 10-15; Bermuda grass, 24-36; birdsfoot clover, 60; bitter vetch, 60; bluegrass, Canada 14-20, Kentucky 14-30, Texas 14; broad bean, 50-60; brome, awnless, 10-14; broom corn, 45-60; bur clover, hulled 60, unhulled 8-10, spotted 60; castor bean, 46-60; clover, alsike 60, crimson 60, Egyptian 60, mammoth 60, red 60, white 60; cowpea, 56-60; crested dog's tail, 14-30; fescue, hard 12-16, meadow 14-24, red 12-15, sheep's 12-16, tall 14-24, various leaved 14-18; flat pea, 50-60; flax, 48-56; hemp, 40-60; Japan clover, hulled 60, unhulled 18-25; Johnson grass, 14-28; Kaffir corn, 50-60; lentil, 60; lupine, white, 50-60; meadow foxtail, 7-14; meadow grass, fowl 11-14; rough-stalked, 14-20, wood 14-24; millet, barnyard 30-60, broom corn 45-60; common 48-50, German 48-50, Golden Wonder 48-50, Hungarian 48-50, Pearl 48-56; Milo maize, 50-60; oat grass, tall 10-14, yellow 7-14; orange cane, 45-60; orchard grass, 10-18; pea, field 60, garden (smooth) 60, garden (wrinkled) 56; peanut, 20-30; rape, winter 50-60; redbot, chaff 10-14, fancy 25-40; rescue grass, 12-28; rice, 43-45; rye grass, English 10-30, Italian 14-25; sainfoin, 14-32; serradella, 28-36; soy bean, 58-60; spelt, 40-60; sunflower, 24-50; sweet clover, hulled 60, unhulled 33; sweet corn, according to variety, 36-56; sweet vernal, perennial, 6-15; teosinte, 40-60; timothy, 45; velvet bean, 60; vetch, hairy 50-60, spring 60; water grass, large 14; wild rice, 15-28; yellow trefoil, 60.

OUR CALLERS

[We have received calls from the following gentlemen prominently connected with the grain and elevator interests during the month.]

E. Dolman, Wanatah, Ind.
J. Dillon, Stoughton, Wis.
Robt. Greig, Toronto, Ont.
G. A. Bell, Ypsilanti, Mich.
R. A. Miller, Lindsay, Ont.
G. M. Gwynn, Essex, Iowa.
Jno. Barker, Philadelphia, Pa.
S. B. Laird, Peterborough, Ont.
J. O. Foering, Philadelphia, Pa.
J. C. Hoover, Bark River, Mich.
Wm. S. Todd, president Interstate Grain Co., Cincinnati, Ohio.
Jno. H. Adams, representing Milling and Grain News, Omaha, Neb.
F. E. Lehman, representing Nordyke & Marmon Co., Indianapolis, Ind.

Fancy rates for lake grain cargoes were secured by vessels which loaded out of Port William early in the month. The expiration of insurance on December 5 and the arbitrary closing of navigation was the cause. One vessel took a cargo of 225,000 bushels of wheat for prompt delivery at Buffalo at 4 cents. Other charters were placed at 3 cents.

LATE PATENTS

Issued on November 15, 1904.

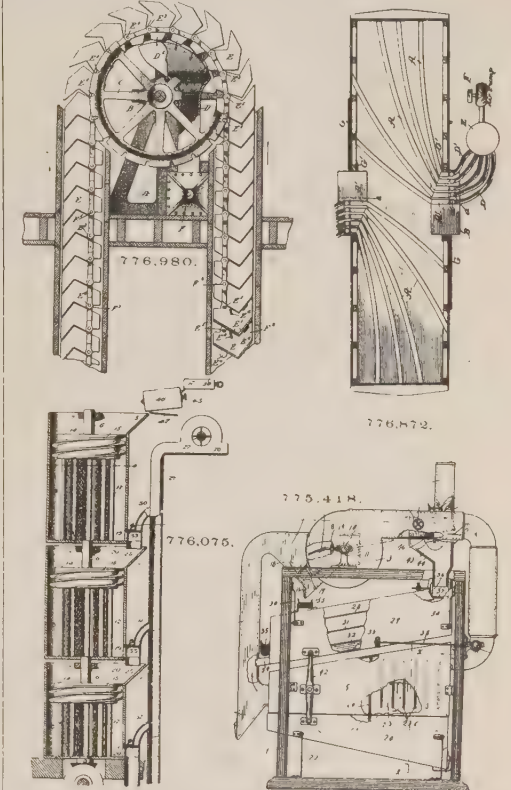
Portable Conveyor.—Jesse Ainsworth, Lyons, Kan. Filed Nov. 17, 1903. No. 774,731.

Issued on November 22, 1904.

Combined Grain Separator and Dust Collector.—Emil R. Draver, Richmond, Ind. Filed June 25, 1903. No. 775,418. See cut.

Issued on November 29, 1904.

Endless Elevator.—Emil Bousse, Darmstadt, Germany. Filed April 22, 1903. No. 776,010.



Frictional Scourer for Grain and Other Similar Products.—George W. Long, Portland, Ore. Filed Nov. 27, 1903. No. 776,075. See cut.

Issued on December 6, 1904.

Portable Grain Conveyor.—John W. McCoy, Stafford, Kan. Filed May 9, 1904. No. 776,611.

Grain Drier for Cars.—James J. Swaine, Baltimore, Md. Filed April 11, 1904. No. 776,872. See cut.

Elevator.—Emil Altmann, Helena, Mont. Filed Jan. 15, 1904. No. 776,980. See cut.

STORING GRAIN IN MINNESOTA.

A lawsuit growing out of the storing of grain in private elevator for a farmer at Redwood Falls, Minn., recently came to judgment, the trial court finding the issues for the farmer.

The case was that of Levi Charter and others against Wm. J. Bettingen & Co. The facts as stated by the court are that the wheat in controversy, 5,589½ bushels, was stored in the elevator of J. A. Engelhart, who owned the property up to March 14, 1902. Bettingen & Co. were his Minneapolis consignees. On March 14, 1902, Engelhart transferred all of his elevator property at Redwood Falls to Bettingen, claiming that an oral agreement had been made that Bettingen was to pay all the outstanding storage tickets. Bettingen denied this.

The court contended that the wheat was unlawfully shipped out of Engelhart's elevator and consigned to Bettingen; and that inasmuch as the law regards it as stolen property, Bettingen must return the wheat or pay over to charter the value of the same. The court concludes his opinion as follows: "Each of the warehouse receipts was an obligation on the part of Engelhart to deliver a certain quantity of wheat to the holder, and as Bettingen had entered into a contract made for the benefit of the holders, if they elected to avail themselves of the contract, I think they were bound, before bringing suit, to make a demand upon Bettingen; and if such demand were refused, the holder was entitled to recover the market value of the wheat at the time of the demand."

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

WHITE WHEAT FOR SALE.

If in need of white wheat write or telegraph
SAM WILLIAMSON, Salt Lake City, Utah.

BAGS FOR SALE.

10,000 second-hand, 2-bushel grain bags, 10,000 140-pound export flour bags, 5,000 5-bushel oat bags. Cheap.

WILLIAM ROSS & CO., 57 So. Water St., Chicago, Ill.

FOR SALE.

Dwarf Essex rape in car lots for sale. Can make very favorable prices delivered your station for through shipment from Europe. When in market ask for prices from the direct importers.

HENRY NUNGESSER & CO., Seed Merchants, New York, N. Y.

BEST BIDDER GETS IT.

Regards our Canadian lands, quite a number have examined same of late. We are going to sell and the best bidder gets it. It is the choicest and cheapest land on the market, so if you want it act quick. Address

W. R. MUMFORD CO., 428-30 Rialto Bldg., Chicago, Ill.

ELEVATORS

KANSAS ELEVATORS.

Elevators for sale in Kansas. Address
E. J. SMILEY, 37 Crawford Bldg., Topeka, Kan.

ELEVATOR FOR SALE.

Capacity 10,000 bushels, located at West Concord, Minn. Good crops. Address

C. W. FAIRBANK, West Concord, Minn.

FOR SALE.

Western Iowa elevator for sale. Capacity, 8,000 bushels, with 5-horsepower gasoline engine; in town with two lines of railroad and good grain station. Address

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FOR SALE.

One 30 H. P. Witte Gasoline Engine, nearly new; with all fittings; cheap.

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ATLAS ENGINES.

For sale, 15, 20 and 25 horsepower Atlas Engines and Boilers in A-1 condition. Prices low.

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FOR SALE.

One 15-horsepower engine, 20-horsepower boiler, f. o. b. Dwight, Ill. Price, \$150. Address

MERRITT BROS. & CO., Dwight, Illinois.

FOR SALE.

One 15-horsepower Erie Gas Engine. This engine is in fine repair and is running every day. Address

W. J. JENKINS, St. Paris, Ohio.

SCALES

SCALES FOR SALE.

Scales for elevators, mills, or for hay, grain or stock; new or second-hand at lowest prices. Lists free.

CHICAGO SCALE CO., 299 Jackson Boulevard, Chicago, Ill.

SCALES FOR SALE.

Fairbanks Standard Scales at 70-80 per cent discount (new); don't pay any more; don't buy second-hand scales when you can get the genuine Fairbanks Standard, new, for less money. Address for particulars.

P. O. BOX 194, Chicago, Ill.

Miscellaneous & Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

HELP WANTED

WANTED.

A working foreman for 350,000-bushel elevator. Must have knowledge of machinery and know how to grade grain and operate cleaning and clipping machinery. Address

"ELEVATOR," Box 11, care "American Elevator and Grain Trade," Chicago, Ill.

ELEVATORS WANTED

ELEVATOR OR MILL WANTED.

In Kansas or Nebraska, if priced right, in exchange for 640-acre stock farm in Southern Missouri, close to good railroad town. Abundant range and water; two sets of improvements; some stock. Or will sell. Address, stating price, etc.,

C. T. MANN, Marietta, Kan.

MACHINERY WANTED

MONEY IN YOUR POCKET.

If you want to change that second-hand machine into money advertise it in this department. Or if you have a grain elevator to sell or rent, or wish to buy, make your wants known through these columns.

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GRAIN WANTED.

Wanted—Feed barley and new No. 2 and No. 3 rye.

W. H. SMALL & CO., Evansville, Ind.

WINTER WHEAT WANTED.

Shippers of winter wheat will do well to communicate with us. We take C. & O. or Kanawha & Michigan delivery.

TURLEY & STEELE, Brokers, Charleston, W. Va.

Burlap Bags!! Grain Bags!!

ALL SIZES MADE TO ORDER

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WE manufacture all gauges of corrugated iron, either painted or galvanized. We make Patent Cap Roofing, Roll Cap Roofing, "V" Crimped Roofing, Metal Ceilings, etc., etc.

We make a specialty of

Corrugated Iron and Metal Roofing For Grain Elevators

And take contracts either for material alone or job completed. Write us for prices. We can save you money.

FOR SALE

Paxton Mill,	-	Harrisburg, Pa.	1,200 bbls.
Swartley Mill,	-	Doylestown, Pa.	120 "
Mingle-Fulmor Mill,	-	Hatboro, Pa.	100 "
York Mill,	-	York, Pa.	200 "
Gochnauer Mill,	-	Boiling Springs, Pa.	100 "
Seaboard Mill,	-	Reading, Pa.	400 "
Columbia Mill,	-	Columbia, Pa.	150 "
Loucks-Codorus Mill,	-	York, Pa.	125 "
Freed Mill,	-	North Wales, Pa.	100 "
Stony Creek Mill,	-	Norristown, Pa.	50 "

C. H. DEMPWOLF, YORK, PA.

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OUR SPECIALTY: RECLEANED ILLINOIS SHELLED CORN
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KANSAS CITY, MO.

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Milling Wheat a Specialty

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Buyers
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Battle Creek,
Mich.

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E. L. ROGERS & CO.

Receivers and Exporters

Commission Merchants

Grain, Feed, Hay, Straw, Etc.

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Walter Griscom GRAIN AND FEED

467 Bourse Bldg., Philadelphia, Pa.

I desire to make connections with western dealers who have
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Samples and Correspondence Solicited

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handling of CORN AND OATS.

REFERENCES { Manufacturers' National Bank, Philadelphia, Pa.
Union National Bank, Westminster, Md.

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W. W. ALDER

T. J. STOFER

Alder & Stofer

COMMISSION
MERCHANTS

We do not buy any grain, but handle on commission, and solicit your Buffalo consignments.

83 Chamber of Commerce,
BUFFALO - - NEW YORK

Consign Your Grain to

BURNS BROS.

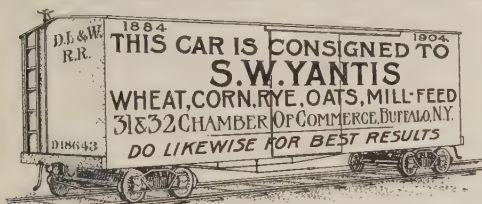
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Members Grain Dealers National Association.

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Barley

70-71 Board of Trade, BUFFALO, N. Y.



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Red Clover, White Clover, Red Top, Hungarian, Kaffir Corn,
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Send us your samples or ask for ours

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Top Market Prices—Quick Returns

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MEMBERS OF
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Duquesne National Bank.

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Write us for official Price Current, mailed regularly
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Successors to GILLETT & HALL

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Good Prices

Prompt Returns

Very Best Attention

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Strict attention to inspection and weights. Satisfactory sales
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and Chicago Journal. Will send either paper free to customers.

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C. W. LEE F. J. FAHEY

Consign your grain and seeds and send your
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Your interests are our interests.

Special attention given to cash
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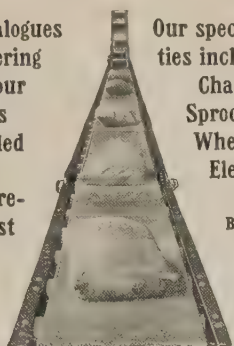
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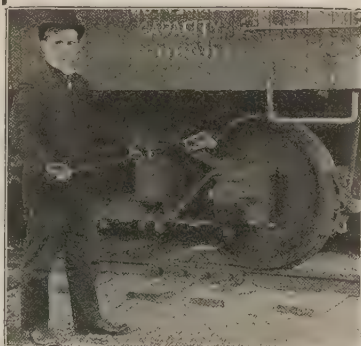
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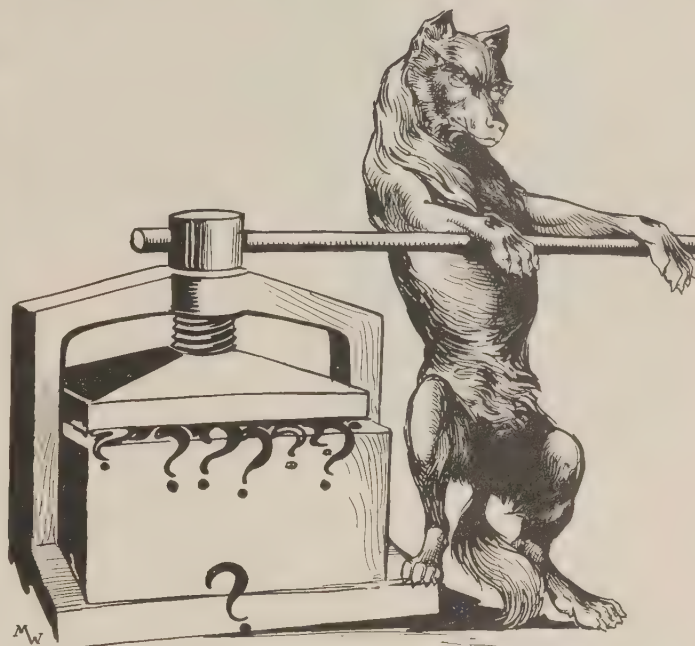
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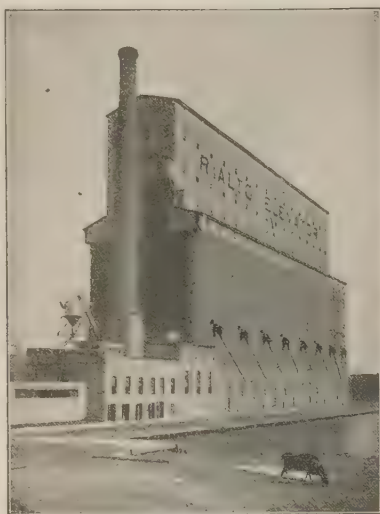
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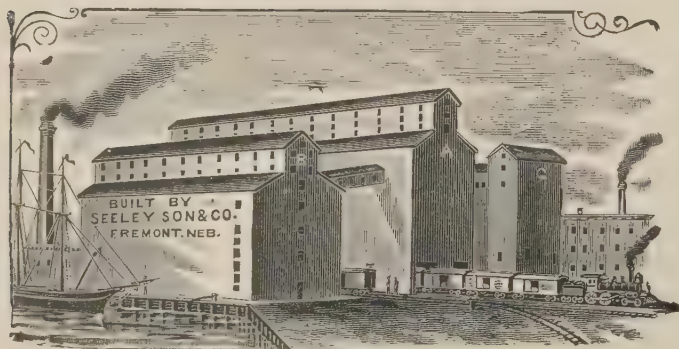
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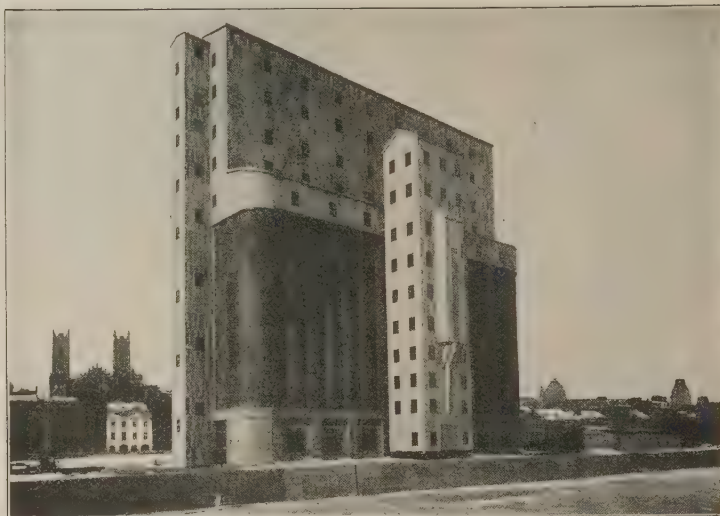
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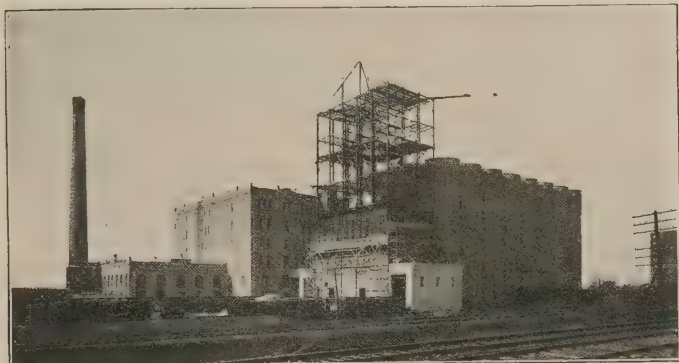
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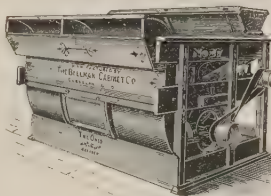
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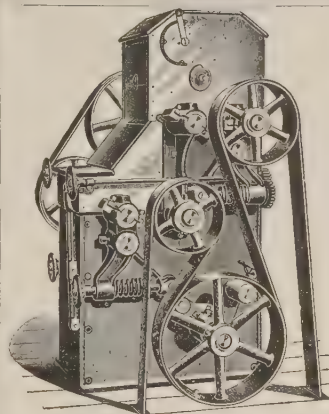
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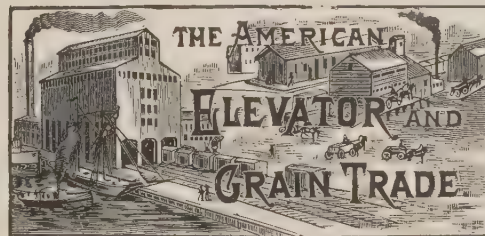
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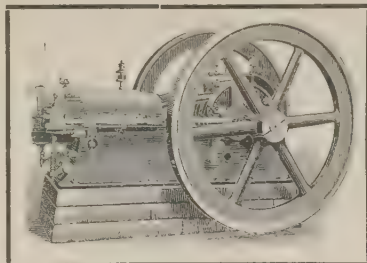
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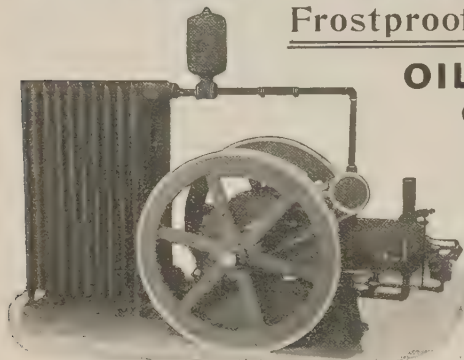
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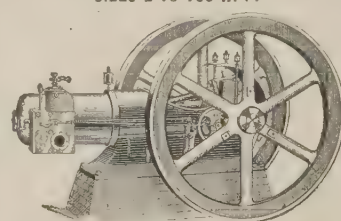


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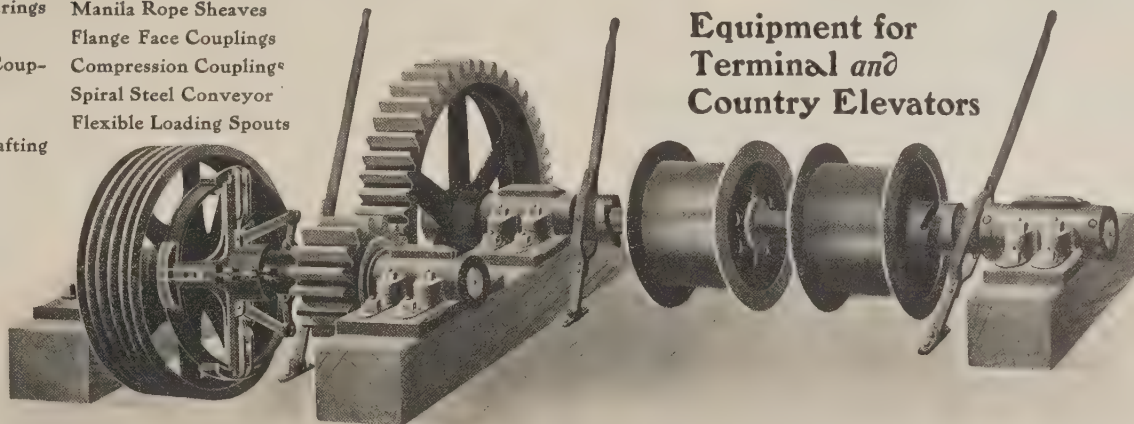
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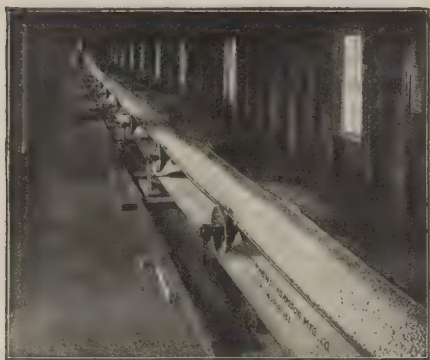
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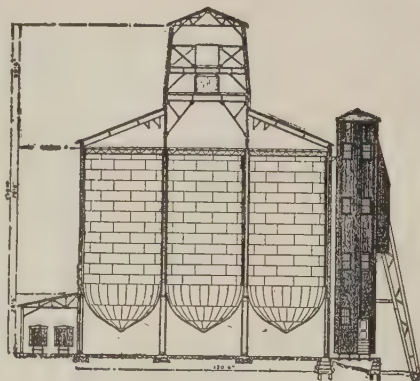
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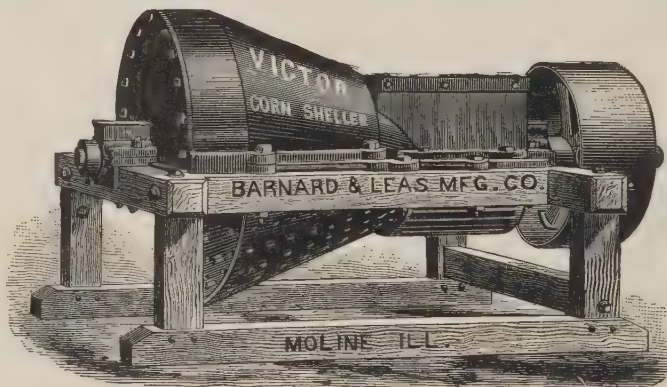
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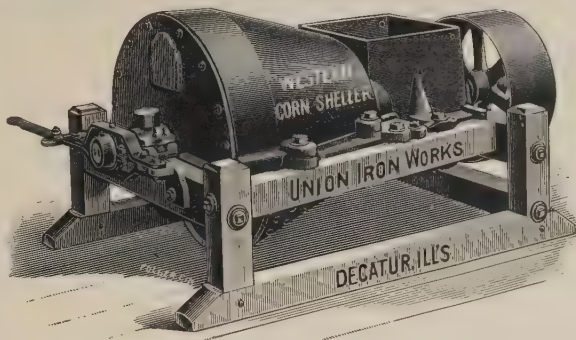
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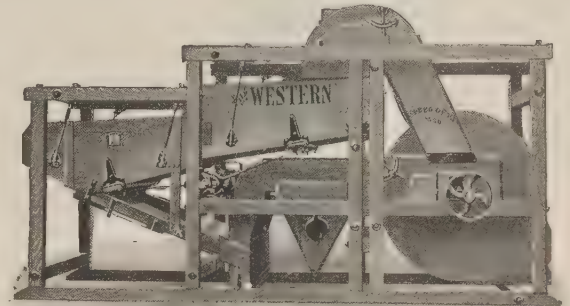
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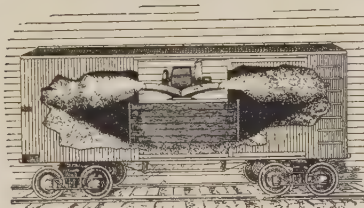
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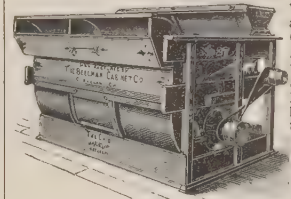
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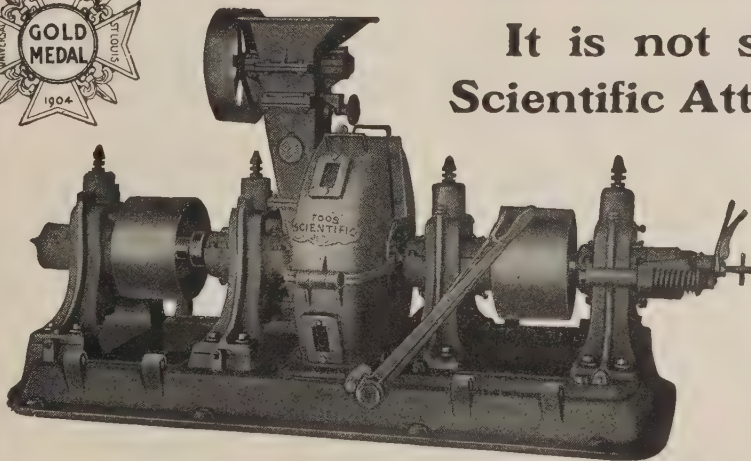
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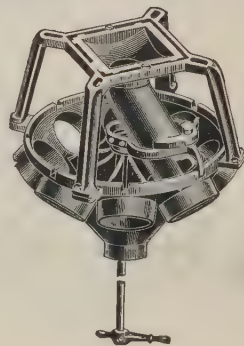
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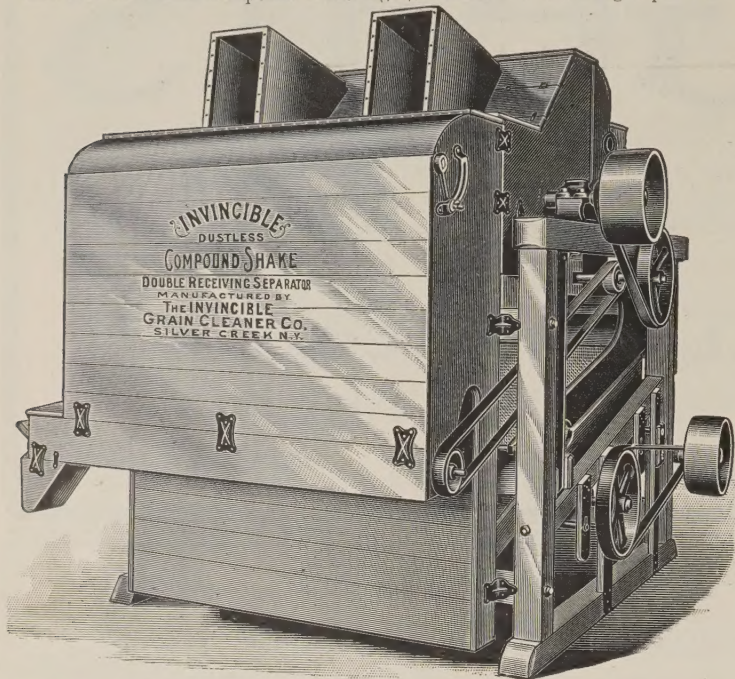


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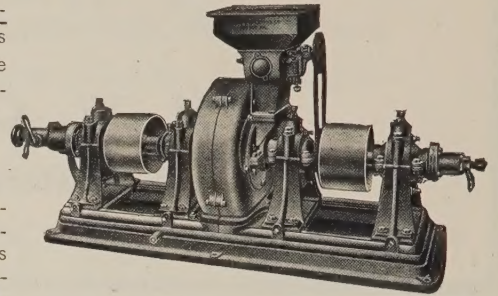
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We know that the Monarch Attrition Mill is the most successful of all feed grinders, and in order that you may know it too, we want you to investigate our claims. We tell you that the Monarch will grind more feed with less power than any other mill, but unless we can prove this to your satisfaction the statement goes for nothing. We can "make good" if you will give us the opportunity.

Some of the exclusive Monarch features are: Phosphor-bronze interchangeable bearings—cool running and minimum amount of attention; cable chain oilers—perfect and economical lubrication; double movable base—allows inspection and adjustment; interchangeable or seal rings—can be replaced at small expense and save cost of entire new head and shaft when worn. Added to these are: Safety spring, quick release, relief spring, special adjustable three-pulley drive, hammered steel shafting, ball bearings, etc., making the Monarch as near mechanically perfect as brains and money can do.

If you are in the market for a mill, let us send you our special catalogue.

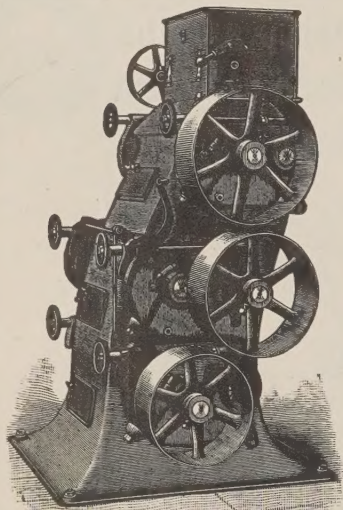
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3-PAIR-HIGH, SIX-ROLLER MILL.

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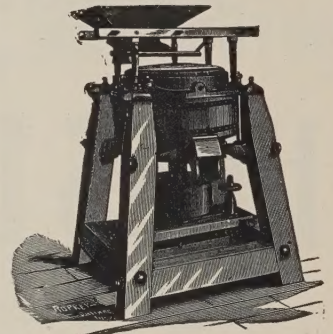
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We manufacture Elevator Cups for all purposes, and make a greater number of sizes than found in any standard list. Our Cups have greater capacity than others of same rated size; for instance, our 3½x3 inch, list price 9c., has as much capacity as others 3½x3½ inch, list price 10c. Our prices are right.

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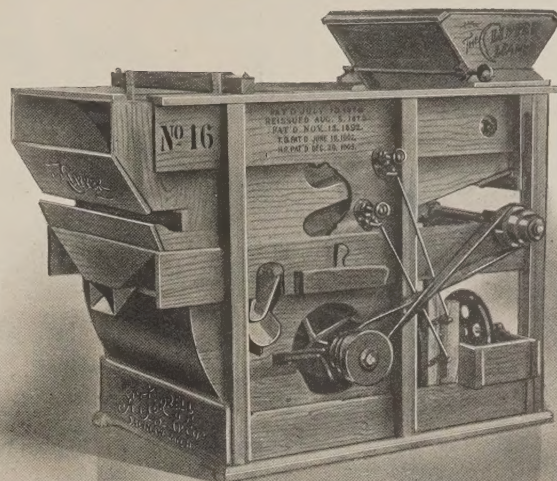
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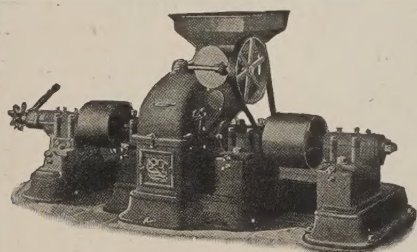
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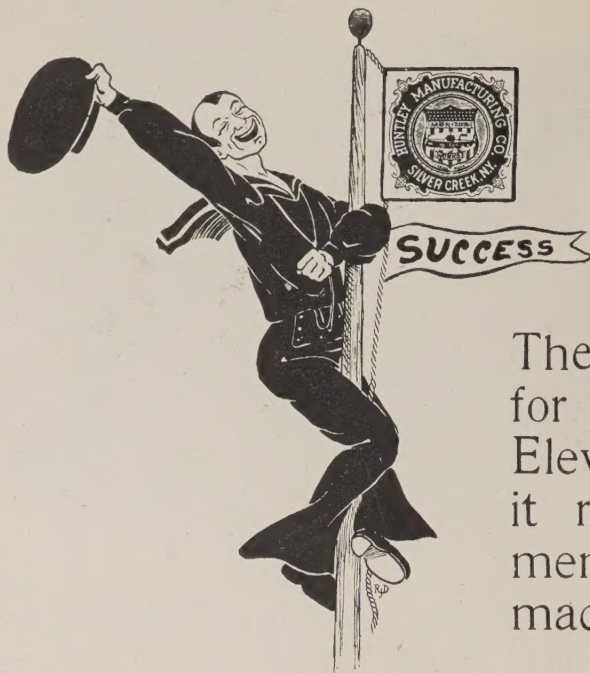
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